GOVERNMENT OWNED INVENTIONS

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PREPARED BY THE OFFICE OF THE CHAIRMAN, GOVERNMENT PATENTS BOARD

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A LIST OF 3,658 PATENTS ARRANGED BY INDUSTRIAL USE

Listed in this book are . . .

3,658 Government-owned inventions which are ordinarily available to the public on a nonexclusive, royalty-free license basis.

These inventions embrace a wide variety of new products and processes, raw-material uses, additional techniques for producing already known results, and advances made in methods and processes. Many of the inventions require a minimum of technical development. Where an invention does not immediately and specifically meet a given need, it may serve as a stimulating and diversified source of new ideas which may help to solve the problem at hand.

The material in this publication has been prepared by the Office of the Chairman of the Government Patents Board, Archie M. Palmer, Chairman, and is based upon the records of the Index of Inventions, which is maintained in that Office pursuant to Executive Order 10096, issued by the President on January 23, 1950. It has been published by the United States Department of Commerce through its Office of Field Service, Carlton Hayward, Director, as a service to the public and particularly to American business as well as to Government officials and others concerned with the use of Government-owned inventions.

This publication lists the Government-owned inventions covered by patents active as of January 1, 1953. It supersedes the 1951 publication, GOVERNMENT-OWNED INVENTIONS FOR FREE USE, covering 2,339 patents active as of January 1, 1951. The response to the earlier publication prompted the preparation of the present book with its additional patents and more convenient arrangement of information.

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How These Inventions Are Arranged • • •

In order to aid the user of this publication in selecting inventions which may be suitable to his purpose, the patents covering the 3,658 inventions are classified and arranged according to the industrial use of the inventions. The system for this arrangement is based on the Standard Industrial Classification Manual, Volume 1, Part 1, published by the U. S. Government in 1945. The patents are divided into 20 major industrial groups, each of which is subdivided into an appropriate number of subgroups.

A four-digit numbering system is employed to locate the patents. The first two digits identify the major industrial group and the last two digits show the particular subgroup within the major group. For example, *Major Group 28, Chemical and Allied Products,* has *11, Sulfuric Acid,* as one of its subgroups. The subgroup is identified by the number *28–11.*

Information given for each patent includes the United States patent number, the title of invention, the name of inventor, and the abbreviated name of the Government agency administering the patent. Abbreviations are keyed on the inside back cover. In cases where an invention is usable in more than one industry, the patent is listed under each applicable subgroup. As a further aid in making selections, each major industrial group and each subgroup is specifically described.

The Index of Inventions • • •

One of the responsibilities of the Chairman of the Government Patents Board is the collection, maintenance, and dissemination of information concerning all inventions and rights therein, including licenses, owned or controlled by the Governemnt. Accordingly, the Index of Inventions has been developed. The Index contains summaries, abstracts, and industrial classifications of more than 16,000 patented inventions in which the Government possesses an interest, including the 3,658 Government-owned inventions listed in this publication as ordinarily available for royalty-free licensing.

The other inventions among the more than 16,000 recorded in the Index are not owned by the Government but are, for the most part, under license to the Government for its own use and for the use of others producing for the Government. The Index is available for examination by the public. It is located in the Office of the Chairman, Government Patents Board, Department of Commerce Building, Washington 25, D. C.

Abstracts of Inventions • • •

Abstracts of the inventions are maintained as part of the Index and constitute a valuable and condensed source of scientific and technological information. Each abstract contains approximately 100 words describing the specific embodiment of the invention, with special reference to its novel features, and discloses: (1) its construction if a machine, apparatus, device or article, (2) its identity if a chemical compound, or (3) the procedure involved if a process.

Sets of abstracts for the 3,658 inventions listed in this publication are available in field offices of the Department of Commerce, where they may be freely consulted. A list of these offices appears on the back cover of this book.

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HOW TO USE THIS BOOK

1. *Consult the table of contents below to select the industrial group or groups in which you are interested.*

2. *Turn to the pages shown in the table of contents to find the patents listed under the group or groups selected.*

3. *If you want to know more about a particular patent:*
   (a) *Consult the nearest U. S. Department of Commerce Field Office (listed on the back cover of this book) concerning an abstract of the patent,*
   or
   (b) *Send the patent number and title with 25 cents for each copy to:*

   Commissioner of Patents
   U. S. Department of Commerce
   Washington 25, D. C.

   Make check or money order payable to him.

4. *To obtain a license to use any of the patents listed in this publication, contact the Government agency shown as the administrator of the patent (address given on the inside back cover).*

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GOVERNMENT-OWNED INVENTIONS AVAILABLE FOR LICENSE

MAJOR GROUP 19—ORDNANCE AND ACCESSORIES

The patents listed under this title relate generally to establishments engaged in manufacturing artillery, small arms, and related equipment; ammunition; tanks and tank parts; sighting and fire-control equipment; and miscellaneous ordnance and accessories, not elsewhere classified.

SUBGROUP 19–11—Guns, howitzers, mortars, and related equipment.

The following patents relate to establishments engaged in manufacturing naval, aircraft, antiaircraft, tank, coast, and field artillery, including mortars, having a bore 20 mm. and over (or over .60 caliber), and components such as gun turrets, mounts, carriages, and limbers; and turret and mount parts. Patents regarding establishments engaged in manufacturing small arms and parts (under 20 mm., or .60 caliber and under) are classified in Subgroup 19–51.

Patent No.	Title of Invention	Inventor	Agency
2,043,989	Mount for Antiaircraft Guns	Conlon, T. A Beatty, G. W.	Army
2,125,892	Gun	Dabrasky, A	Army
2,213,953	Automatic Gun	Conlon, T. A	Army
2,216,860	Breechblock Operating Mechanism	Summerbell, W	Army
2,245,621	Firing Mechanism	Summerbell, W	Army
2,245,622	Breechblock Operating Mechanism	Summerbell, W	Army
2,245,623	Firing Mechanism	Summerbell, W	Army
2,319,206	Machine for Rifling Guns	Bush, V	Army
2,362,484	Pressure Gauge	Hickman, C. N	Army
2,364,103	Recoil Mechanism	Simpson, C. E	Army
2,390,525	Molding Process and Product Thereof.	Egan, C. W	Army
2,404,889	Collocating Gauge	Ringie, D. F	Navy
2,406,537	Recoilless Mechanism for Guns and Mortars.	Goehmann, M. H	Army
2,415,300	Machine for Rifling Gun Barrels	Lovely, J. E	Navy
2,425,359	Apparatus for Producing Tapered Electrodeposits.	Zavarella, A	Army
2,434,972	Recoil Operated Device for Opening and Closing a Breechblock Mechanism.	Vick, F. A	Army
2,438,297	Recoilless Gun	Pope, W. B	Army
2,440,977	Control Apparatus and Bracket Therefor.	Rowe, H. A	Army
2,442,371	Gun Recoil Mechanism	Meyers, D. L Kester, A. A.	Army
2,444,949	Recoilless Firearm	Musser, C. W	Army
2,454,276	Subcaliber Gun Mount	Davis, G. B	Army
2,456,652	Buffer Mechanism for Firearms	Simpson, C. E	Army
2,462,114	Sear Release Mechanism	Lochhead, J. L	Army
2,462,920	Breechblock Operating Mechanism with a Torsion Closing Spring.	Summerbell, W Weiss, S.	Army
2,465,931	Launching Device for Firing Projectiles from a Mortar.	Roderick, O. R	Army
2,465,962	Protection of Bore Surfaces of Guns	Allen, H. B Smith, N. H.	Army
2,466,698	Optical Bore-Straightness Indicator	Getler, M. W	Army
2,473,114	Harness	Todd, E. T	Army
2,473,555	Breech Loading Mortar with Obturator Case.	Weiss, S	Army

Patent No.	Title of Invention	Inventor	Agency
2,475,387	Ordnance Pressure Time Recorder	Golden, S	Army
2,483,385	Limit Stop Mechanism for Power Operated Gun Mounts.	Humphrey, P. E	AF
2,498,052	Method of Retarding Erosion of Gun Barrels.	Smith, N. H	Navy
2,499,944	Gun Tube Liner Material	Schairer, J. F Brace, P. H. Marden, J. W.	Army
2,503,309	Firing Mechanism for Mortars	Weiss, S	Army
2,520,966	Rammer	Schiff, S	Army
2,522,497	Breech Operating Mechanism	Beardsley, O Fox, R. W. Braucher, H. M.	Army
2,543,766	Barrel Extension and Coupling Device for Attachment to Gun Barrels.	Davis, G. B	Army
2,551,061	Method of and Device for Grinding Interior Faces of Tubes.	Saccas, G. N Simpson, F. R.	Army
2,554,618	Automatic Guns	Dixon, P. H	Army
2,555,379	Breech Block Lock for Firearms	Simpson, C. E	Army
2,557,960	Base Plate for Mortars	Gerhardt, W. R	Army
2,572,882	Mortar Sight Bracket and Sight	Roberts, E. C Davis, G. B.	Army
2,576,015	Gun Charger	Humphrey, P. E	AF
2,582,288	Breech Operating Mechanism for Automatic Firearms.	Simpson, C. E	Army
2,582,989	Gas Piston for Firearms	Harvey, E. M	Army
2,586,229	Replaceable Firing Pin for Mortars	Hickman, C. N	Army
2,594,359	Firing Mechanism for Automatic Firearms with Nonaxial Rectilinear Breechblock Motion.	Simpson C. E	Army
2,595,239	Hydrospring Shock Absorber	Gay, H. P	Army
2,598,017	Gun Recoil Absorbing Mechanism	Rockwell, G. O	Navy
2,598,256	Recoilless Gun	Hickman, C. N	Army
2,600,492	Cartridge Belt Link	Dixon, P. H	Army
2,604,820	Shell Feeding Mechanism for Cannons.	Schiff, S	Army
2,611,297	Means for Locking Firearm Barrels	Simpson, C. E	Army

SUBGROUP 19–21—Artillery ammunition

The following patents relate to establishments engaged in manufacturing ammunition 20 mm. and over (or over .60 caliber) for naval, aircraft, antiaircraft, tank, coast, and field artillery, including component parts (cartridge cases, machined projectile forgings, fuses, boosters, etc.). Patents regarding establishments engaged in manufacturing small arms ammunition are classified in Subgroup 19–61, and explosives in Subgroup 28–26.

Patent No.	Title of Invention	Inventor	Agency
2,201,209	Fuse	Schultze, F	Army
2,206,057	Rocket Projectile	Skinner, L. A	Army
2,345,910	Connection for Elements of Rotatable Unites.	Fawcett, C. C	Army
2,369,003	Propellent Charge Holder	Anderson, N. F	Army
2,395,248	Centrifugal Switch	Busacker, J. W Teresi, J. A.	Navy
2,398,734	Setback and Centrifugal Switch	Busacker, J. W	Navy
2,402,702	Fuse	Woodberry, J. H Storm, C. G. Barker, J. S. Miles, F. H. Brayton, H. M. Seavey, C. E.	Army
2,406,730	Vibrator	Whitehead, R. H	Navy
2,413,680	Ogive Mounting Means for Projectiles.	Blackinton, G. W Calhoun, J. J.	Army
2,415,806	Compound Detonators	Bain, C. J Carl, L. R.	Army
2,415,848	Black Powder	Rinkenbach, W Allison, V. C.	Army
2,420,028	Electrical Switch	Bleakney, R. M Workman, E. J.	Navy
2,420,324	Mechanical Time Fuse	Middlemiss, J. E	Army

Patent No.	Title of Invention	Inventor	Agency
2,423,862	Binding and Covering Apparatus	Vorobik, C. E	Navy
2,424,230	Method and Means for Securing A Hairspring to an Arbor.	Fawcett, C. C	Army
2,424,970	Explosive Projectile	Church, J. H Kessenich, G. J.	Army
2,425,017	Attachment of Hair Springs to Arbors	Wentz, R. R	Army
2,426,190	Mechanical Time Fuse	Fawcett, C. C	Army
2,429,650	Front Sear for Rifles	Schiff, S	Army
2,431,027	Setback Switch	Busacker, J. W Maneval, R. L.	Navy
2,431,683	Detonator Tester	Biggar, A. M	Army
2,438,383	Unshorting Switch	Brode, R. B	Navy
2,440,677	Timing Mechanism	Fix, E. J	Army
2,441,569	Safety Device for Fuses	Fix, E. J	Army
2,441,897	Method of and Apparatus for Exploding Armor Piercing Projectiles.	Nichols, H. J	Navy
2,442,369	Rifling Band	McBride, E. T	Army
2,445,307	Force Guage	Mindlin, R. D	Navy
2,453,151	Projectile	Miller, G. A	Army
2,458,467	Centrifugal Delay Switch	Dike, S. H	Navy
2,458,468	Safety Gate for Projectiles	Flett, W. J	Navy
2,458,473	Detonator	Jordan, J. D	Navy
2,458,478	Setback Switch	Maneval, R. L	Navy
2,458,479	Setback Switch	Perry, T. M	Navy
2,458,483	Centrifugal Safety Delay Switch	Tatel, H. E	Navy
2,475,730	Projectile Offset	Wandrey, C. W	Army
2,485,887	Projectile	Jordan, J. D	Navy
2,485,949	Delay Action Fuse	Wilson, B. J Stringer, J. E.	Army
2,486,362	Acceleration Switch	O'Brien, L. A	Army
2,490,389	Quick Action Fuse	Wales, N. B	Army
2,498,026	Mercury Switch Tester	Brown, C. F	Navy
2,498,032	Thermal Circuit Breaker	Dell, A. H Sreb, J. H.	Navy
2,498,050	Fulminating Fuse	Selvidge, H	Navy
2,509,903	Antenna and Oscillator Coil Unit	Brode, R. B Ferris, R. G.	Navy
2,509,910	Time Delay Circuit	Dike, S. H	Navy
2,513,157	Nose Structure for Projectiles	Ferris, R. G Dike, S. H.	Navy
2,513,185	Pressure Armed Fuse	Lauritsen, C. C	Navy
2,513,536	All Angles of Impact Inertia Fuse	Wellington, C	Army
2,514,499	Delay Action Fuse	Kharasch, M. S Westheimer, F. H.	Army
2,515,043	Safety Switch	Jordan, J. D	Navy
2,515,066	Fuse	Williams, P. S Sewell, B. W.	Navy
2,516,890	Fuse	Liljergren, L	Army
2,522,514	Arming Device	Hickman, C. N	Army
2,528,823	Mechanical Time Fuse	Fink, J. Hebbeln, L.	Navy
2,537,855	Point Contact Fuse	Porter, H. H	Army
2,537,953	Powder Train Interrupter	Andrews, L. M	Navy
2,541,025	Artillery Ammunition Training Round.	Bluford, G. S Musser, C. W.	Army
2,548,926	Insulated Trap for Rocket Projectiles	Africano, A	Army
2,548,972	Igniter Case for Rockets	Grisamore, N Kossiakoff, A.	Army
2,549,811	Powder Trap	Hickman, C. N	Army
2,552,482	Variable Resistance	Ferris, R. G Jordan, J. D.	Navy
2,554,586	Detent	Miller, R. D	Navy
2,558,000	Adjustable Arming Mechanism	Rabinow, J	Army
2,586,437	Powder Train Interrupter	Rabinow, J	Navy
2,588,424	Electric Switch	Speaker, H. B	Army
2,596,171	Pressure Switch for Fuses	Rabinow, J	Army

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Patent No.	Title of Invention	Inventor	Agency
2,597,638	Extrusion Die for Solventless Powder	Higbie, H. E	Army
2,597,758	Setback Gauge	Sreb, J. H	Navy
2,598,157	Fuse Detonating Mechanism	Everett, F. L	Army
2,616,372	Projectile	Frantik, R. O	Navy

SUBGROUP 19–22—Ammunition loading and assembling

The following patents relate to establishments engaged in loading and assembling ammunition 20 mm. and over, or over .60 caliber (bag, shell, and bomb loading plants).

Patent No.	Title of Invention	Inventor	Agency
2,432,706	Propellant Retainer	Anderson, N Hall, R. R.	Army
2,541,025	Artillery Ammunition Training Round	Bluford, G. S Musser, C. W.	Army

SUBGROUP 19–29—Ammunition, not elsewhere classified

The following patents relate to establishments engaged in manufacturing ammunition, not elsewhere classified, including bombs, mines, torpedoes, grenades, depth charges, and chemical-warfare projectiles and their component parts. Patents regarding establishments engaged in manufacturing military pyrotechnics are classified in Subgroup 39–85.

Patent No.	Title of Invention	Inventor	Agency
2,069,276	Life Line Projectile	Ryan, M. J	Treas
2,232,714	Mechanical Time Fuse	Mathsen, M. L Reinhard, A. E.	Army
2,255,043	Fuse Setting Machine	Beatty, G. W	Army
2,295,671	Bomb	McCloud, D. B Lewis, G. A. Storm, C. G	Army
2,329,710	Means for Securing Hairsprings to Arbors.	Fix, E. J	Army
2,334,182	Time Fuse	Farrow, S	Army
2,361,518	Fuse	Whitehead, R	Navy
2,395,248	Centrifugal Switch	Busacker, J. W Teresi, J. A.	Navy
2,395,902	Electronic Chronoscope for Measuring Rates of Detonation.	Nisewanger, C Brown, F. W.	Int.
2,396,463	Control of Torpedo Antenna	Hammond, J. H	Navy
2,396,478	Steering Control	Trenor, A. D	Navy
2,406,537	Recoilless Mechanism for Guns and Mortars.	Goehmann, M. H	Army
2,406,730	Vibrator	Whitehead, R. H	Navy
2,411,828	Antenna Release Mechanism	Hammond, J. H	Navy
2,413,066	Torpedo Control by Multiple Channel Selector.	Purington, E. S	Navy
2,413,067	Torpedo Control by Timing Selector	Purington, E. S	Navy
2,415,086	Circuit Closer	Detwiler, H. P	Army
2,415,806	Compound Detonators	Bain, C. J Carl, L. R.	Army
2,415,848	Black Powder	Rinkenbach, W. H Allison, V. C.	Army
2,419,102	Process of Setting Time Fuses and Tool Therefor.	Whitehead, R. H	Navy
2,419,103	Hairspring Assembly	Whitehead, R. H	Navy
2,419,815	Water Armed Fuse	Breeze, G. E Gay, G. R.	Navy
2,419,828	Setback Switch	Ferris, R. G	Navy
2,420,028	Electrical Switch	Bleakney, R. M Workman, E. J.	Navy
2,420,241	Torpedo Control Valve	Hammond, J. H	Navy
2,421,390	Mechanical Time Fuse Structure	Patton, B. B	Army
2,421,552	Casing and Nozzle Construction for Rocket Motors.	Eksergian, C. L	Army
2,424,230	Method and Means for Securing a Hairspring to an Arbor.	Fawcett, C. C	Army
2,424,970	Explosive Projectile	Church, J. H Kessenich, G. J.	Army
2,426,190	Mechanical Time Fuse	Fawcett, C. C	Army

Patent No.	Title of Invention	Inventor	Agency
2,427,989	Projectile	Blackinton, G. W Calhoun, J. J.	Army
2,431,027	Setback Switch	Busacker, J. W Maneval, R. L.	Navy
2,431,683	Detonator Tester	Biggar, A. M	Army
2,435,979	Mechanical Time Fuse	Patton, B. B	Army
2,437,694	Method for Blending Powder Grains	Hickman, C. N	Army
2,438,383	Unshorting Switch	Brode, R. B	Navy
2,439,209	Torpedo Director	Halsey, A. S	Navy
2,439,211	Submarine Mine	Hickman, C. N	Navy
2,440,677	Timing Mechanism	Fix, E. J	Army
2,441,388	Projectile	Blackinton, G Calhoun, J. J.	Army
2,441,569	Safety Device for Fuses	Fix, E. J	Army
2,443,041	Fuse	Jordan, J. D	Navy
2,444,411	Variable Time Mechanism	Wellington, C	Army
2,444,957	Flash Reducer	Skinner, L. A	Army
2,445,307	Force Gauge	Mindlin, R. D	Navy
2,448,022	Fuse	Fix, E. J	Army
2,448,121	Arming Device	Porter, H. H	Army
2,450,890	Mechanical Time Fuse	Fix, E. J	Army
2,450,894	Mechanical Time Fuse	Hart, J. J	Army
2,452,558	Fuse	Fawcett, C Hart, J. J.	Army
2,452,892	Igniter for Rockets	Appleton, R. A Bjork, C. F Hickman, C. N.	Army
2,453,122	Reflector Collimator Sight for Torpedo Ejectors.	Ensinger, W. B	Navy
2,453,151	Projectile	Miller, G. A	Army
2,453,479	Time Fuse	Whitehead, R. H	Navy
2,453,682	Bore Safety Device for Time Fuses	Whitehead, R. H	Navy
2,453,822	Time Fuse	Whitehead, R. H	Navy
2,453,828	Torpedo	Barry, L. J Hegamyer, W. S.	Navy
2,455,620	Centrifugal Switches	Sreb, J. H	Army
2,458,467	Centrifugal Delay Switch	Dike, S. H	Navy
2,458,468	Safety Gate for Projectiles	Flett, W. J	Navy
2,458,473	Detonator	Jordan, J. D	Navy
2,458,478	Setback Switch	Maneval, R. L	Navy
2,458,479	Setback Switch	Perry, T. M	Navy
2,458,483	Centrifugal Safety Delay Switch	Tatel, H. E	Navy
2,458,576	Fragmentation Bomb	Etten, N. L	Army
2,459,163	Thermal Igniter	Hickman, C. N	Army
2,461,793	Releasing Mechanism for Time Fuses	Whitehead, R	Navy
2,462,062	Fuse	Beeman, D. R	Army
2,463,210	Delayed-Action Fuse	Sewell, B. W	Navy
2,465,009	Concussion Detonator	Chase, L. H	Army
2,466,729	Fuse	Nelson, C. F	Army
2,466,752	Electrically Fired Rocket Projectile	Uhl, E. G Skinner, L. A.	Army
2,468,120	Air Turbine-Generator for Fuses	Senn, J. A	Army
2,469,351	Fuse	Lauritsen, C	Navy
2,469,352	Fuse	Lauritsen, C	Navy
2,470,139	Camera Shutter	Campbell, A. W	Army
2,472,108	Thrust Gauge for Projectiles	Hickman, C. N	Army
2,472,366	Thermal Time Delay	Brode, R. B	Navy
2,476,479	Tank-Wall Grenade Mounting	Brack, D. L	Army
2,480,563	Safety Device for Fuses	Ferris, R. G Jordan, J. D.	Navy
2,482,089	Method of Making a High-Density Explosive.	Audreith, L Sager, D. D.	Army
2,482,090	Method of Making a High-Density Explosive.	Audreith, L Sager, D. D.	Army

Patent No.	Title of Invention	Inventor	Agency
2,482,091	Method of Making a High-Density Explosive.	Audreith, L. Sager, D. D.	Army
2,485,817	Detonator Safety Device	Dike, S. H.	Navy
2,485,949	Delay Action Fuse	Wilson, B. J. Stringer, J. E.	Army
2,486,362	Acceleration Switch	O'Brien, L. A.	Army
2,487,056	Hydraulic Fuse	King, J. M.	Army
2,488,547	Land Mine	Liljegren, L.	Army
2,490,389	Quick Action Fuse	Wales, N. B.	Army
2,498,025	Pressure-Armed Impact-Fired Fuse	Breeze, G. E. Brockwell, L. A.	Navy
2,498,032	Thermal Circuit Breaker	Dell, A. H. Sreb, J. H.	Navy
2,498,040	Set-Back Switch	Jordan, J. D. Ferris, R. G.	Navy
2,498,043	Fuse	Lauritsen, C. C.	Navy
2,498,050	Fulminating Fuse	Selvidge, H.	Navy
2,501,082	Delayed Action Electric Flare Fuse	Oliver, N. J	Army
2,501,766	Incendiary Grenade	Fieser, L. F. Harris, G. C. Hershberg, E. B. Morgana, M. Novello, F. C. Putnam, S. T.	Army
2,509,943	Marker Flare	Silvey, G. A.	Navy
2,513,185	Pressure Armed Fuse	Lauritsen, C. C.	Navy
2,513,536	All Angles of Impact Inertia Fuse	Wellington, C	Army
2,514,401	Land Mine	Liljegren, L.	Army
2,514,434	Electrical Detonator	Windes, S. L.	Int
2,514,499	Delay Action Fuse	Kharasch, M. S. Westheimer, F. H.	Army
2,515,066	Fuse	Williams, P. Sewell, B. W.	Navy
2,516,323	Safety Gate	Jordan, J. D.	Navy
2,516,890	Fuse	Liljegren L.	Army
2,519,878	Rocket Projectile	Bjork, C. F. Kochis, A. C.	Army
2,519,905	Driver Rocket	Hickman, C. N.	Army
2,520,665	Gyroscope Control Device for Bombs	Warren, B. E.	AF
2,522,514	Arming Device	Hickman, C. N.	Army
2,525,477	Firing Mechanism	Channell, J. W.	Navy
2,528,823	Mechanical Time Fuse	Fink, J. Hebbeln, L.	Navy
2,529,271	Marine Anchorage Means	Winter, C. P.	Navy
2,529,465	Multiple Grain Rocket for Propelling Underwater Torpedoes.	Wallace, R. W. Colburn, W. E.	Navy
2,531,952	Battery Venting Apparatus	Smith, F. H. Couperus, P. G.	Navy
2,532,620	Linear Time Axis Pressure Recorder	Higgs, P. M.	Navy
2,532,645	Hydrostatic Fuse	Rockwell, G. O.	Navy
2,534,744	Bomb Shackle	Wardwell, G. W.	Navy
2,534,745	Bomb Shackle	Wardwell, G. W.	Navy
2,537,855	Point Contact Fuse	Porter, H. H.	Army
2,537,929	Timer	Daly, T. A. Gill, H. A.	Navy
2,537,953	Powder Train Interrupter	Andrews, L. M.	Navy
2,538,156	Control Device	Keto, A. I.	Navy
2,539,643	Apparatus for Decelerating Torpedoes.	Smythe, W. R.	Navy
2,543,422	Control Device	Putman, H. V. Leonard, M. G. Grafinger, L. N. Guidosh, J. A.	Navy
2,544,860	Rocket Fuse	Rasmussen, V.	Navy
2,545,204	Jet-Accelerated Armor-Piercing Bombs.	Hickman, C. N. Graumann, R. Mallina, R. F.	Navy
2,547,309	Pneumatically Actuated Operator for Removing Rip Covers from Tanks.	Elmer, W. B. Rimer, R. R.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,547,820	Fuse and Igniter	Hammer, G. W. Noddain, G. A. Rosen, D. E. Trelease, F. J.	Navy
2,548,926	Insulated Trap for Rocket Projectiles	Africano, A.	Army
2,548,972	Igniter Case for Rockets	Grisamore, N. Kossiakoff, A.	Army
2,549,811	Powder Trap	Hickman, C. N.	Army
2,550,097	Positively Operated Control	Tindal, C. H. Davis, L. K.	Navy
2,552,482	Variable Resistance	Ferris, R. G. Jordan, J. D.	Navy
2,552,497	Variable Throat Rocket Nozzle	Roach, F. E. Duemler, O. E.	Navy
2,554,586	Detent	Miller, R. D.	Navy
2,558,000	Adjustable Arming Mechanism	Rabinow, J.	Army
2,566,242	Removable Closure for Deferred Action Batteries.	Naymik, J.	Navy
2,568,340	Removable Closure for Deferred Action Batteries.	Jennings, L. Naymik, J.	Navy
2,568,433	Propulsion Assembly for Torpedoes	Daly, T. A. Hogue, P. M.	Navy
2,570,813	Wave Guide Attenuator	Joerndt, W. A. Larson, R. W.	Navy
2,572,116	Sectionalized Torpedo	Daly, T. A.	Navy
2,574,479	Propellant having an Opacifier for Preventing Self-Ignition by Radiant Energy Radiations.	Hickman, C. N.	Army
2,575,070	Jacketed Combustion Pot with Fuel and Air Nozzle Head.	Reed, W. A. Shapiro, A. H.	Navy
2,575,973	Tangential Acceleration Gauge	Perry, T. M.	Navy
2,580,834	Depth Control System for Torpedoes	Prescott, H. L.	Navy
2,582,304	Automatic Buoyancy Control System.	Wolfe, R. C. Boyle, T. C.	Navy
2,583,570	Nozzle for Rocket Motors	Hickman, C. N.	Army
2,586,228	Pyrotechnical Device	Hershberg, E. Coburn, E. R.	Army
2,586,801	Incendiary Bomb	Epler, R. B. Woodberry, D. L.	Army
2,586,861	Arming Cover for Fuses	Rabinow, J.	Army
2,588,424	Electric Switch	Speaker, H. B.	Army
2,589,547	Water Trip Switch	Hughes, A. V. Rademacher, L. B.	Army
2,596,171	Pressure Switch for Fuses	Rabinow, J.	Army
2,596,644	Automatically Detachable Flashless Nozzle for Rockets.	Bradford, E. Africano, A. Hickman, C.	Army
2,597,638	Extrusion Die for Solventless Powder.	Higbie, H. E.	Army
2,597,703	Rocket Fin	Busacker, J.	Navy
2,598,157	Fuse Detonating Mechanism	Everett, F. L.	Army
2,601,439	Fluid Pressure Regulator	Karig, H. E.	Navy
2,603,155	Shock Wave Actuated Photoflash Bomb.	Clarke, R. G. Derbyshire, H. Edwards, H. S. Shore, F. J.	Army
2,603,970	Apparatus for Testing Projectile Fuse Safety Devices.	Metzler, S. Thayer, R. H.	Navy
2,604,065	Depth Control System for Torpedoes	Elmer, W. B.	Navy
2,604,556	Switch	Daly, T. A. Sauer, L. E.	Navy
2,605,607	Trap for Rocket Propellent	Hickman, C. N.	Army
2,608,931	Rocket	Lauritsen, C.	Navy
2,611,317	Rotating Nozzle for Rockets	Africano, A.	Army
2,612,747	Rocket having Adjustable Discharge Passage.	Skinner, L. A.	Army
2,613,627	Torpedo Depth Control System	Keto, A. I.	Navy
2,615,416	Variable Enabler For Acoustic Torpedoes.	Daly, T. Gill, H.	Navy
2,620,732	Mortar Charge	Hickman, C. N.	Army
2,620,815	Valve Actuated by Fusible Plug	Margraf, H. J. MacGlashan, W.	Army

SUBGROUP 19–31—Tanks and tank components

The following patents relate to establishments engaged in manufacturing or assembling complete tanks, including amphibian tanks, and tank components. Patents regarding establishments engaged in manufacturing military vehicles other than tanks are classified in Major Group 37, and tank engines are found in Subgroup 35–19.

Patent No.	Title of Invention	Inventor	Agency
2,234,927	Link for Endless Traction Belts	Kubaugh, L.	Army
2,409,635	Mine Destroyer	Langner, L.	Army
2,432,259	End Gate for Amphibian Vehicles	Swennes, B. A.	Navy
2,436,681	Vehicle	Swenson, C. E.	Navy
2,438,424	Method of Fabricating Track Laying Vehicle Shoes.	Swenson, C. E.	Navy
2,443,629	Releasable Connecting Mechanism	Matuszewski, M.	Army
2,444,759	Wheeled Vehicle	Swennes, B. A.	Navy
2,451,522	Rocket Projector	Uhl, E. G. Skinner, L. A.	Army
2,459,470	Motor Vehicle Fuel Tank	Swennes, B. A.	Navy
2,459,975	Wheels for Endless Track Vehicles and Method for Mounting Same.	Swennes, B. A. Shelton, L. E. Swenson, C. E.	Navy
2,460,321	Apparatus for Launching Rockets from Turrets.	Walker, B.	Army
2,476,479	Tank-Wall Grenade Mounting	Brack, D. L.	Army
2,487,397	Amphibian Tank	Swennes, B. A.	Navy
2,520,420	Tank Turret Control	Marcy, H. T.	Army
2,528,645	Hydraulic Power Transmission Apparatus.	Edwards, E. A.	Army

SUBGROUP 19–41—Sighting and fire-control equipment

The following patents relate to establishments engaged in manufacturing sighting and fire-control equipment, but which are not engaged in manufacturing optical lenses and prisms. Included are bomb sights, gun-data computers, percentage correctors, wind correctors, directors, and sound locators. Optical lenses and prisms are classified in Subgroup 38–31.

Patent No.	Title of Invention	Inventor	Agency
2,208,576	Gun Sight	Garand, J. C.	Army
2,380,965	Front Sight for Firearms	Harvey, E. M.	Army
2,408,395	Object Locating System	Hayes, J. B.	Navy
2,409,041	Gun Mounting Mechanism	Hart, F. V. Linderoth, L. S.	Army
2,413,066	Torpedo Control by Multiple Channel Selector.	Purington, E. S.	Navy
2,413,067	Torpedo Control by Timing Selector	Purington, E. S.	Navy
2,426,192	Computer	Ferguson, J. D.	Navy
2,428,678	Bomb Sight	Norden, C. L. Barth, T. H.	Navy
2,435,074	Contrast Measuring Device	Fry, G. A.	Army
2,438,532	Synchronizing Bomb Sight	Barth, T. H.	Navy
2,444,038	Combination Rear Sight and Ejector for Firearms.	Garand, J. C.	Army
2.445,304	Visual Vibrating Reed Stroboscope	Grace, W. J.	Navy
2,445,306	Electrolyte for Primary Cells Comprising Lithium Bromide.	Lawson, H. E.	Navy
2,447,336	Fluxion Meter	Hisserich, C.	Navy
2,451,856	Mechanical Device for Determining the Future Position of Aircraft.	Miller, E. E.	Army
2,453,122	Reflector Collimator Sight for Torpedo Ejectors.	Ensinger, W. B.	Navy
2,458,831	Optical Gun Sight with Horizontal and Vertical Deflection Adjustments.	Cady, W. M.	Army
2,463,200	Indirect Sighting Instrument for Rockets.	Pitzer, K. S.	Army
2,470,156	Contrast Measuring Apparatus having Relatively Rotatable Polarizing Elements for Optical Sighting Instruments.	Fry, G. A.	Army
2,472,138	Plotter Computer for Determining Shellfire Position.	Yamins, H. G. Dunn, R. L.	Army

Patent No.	Title of Invention	Inventor	Agency
2,476,342	Gun Sight	Weiss, H. K	Army
2,478,898	Mortar Sight	Darr, J. E Matson, W. U.	Army
2,479,717	Gun Sight	Bernart, W. F Rouan, F. J. Ford, F. L. Thatcher, L. A.	Army
2,484,537	Bombsight with Trail Angle Sighting Reflector Means.	Van Dyke, H	AF
2,486,453	Stadia Type Range Finder having a Transparent Reflector and Two Mirrors Making Small but Different Fixed Angles with the Reflector.	Whitson, W. L	Army
2,492,353	Dual Periscopic Sight	Brackett, F. S	Army
2,498,033	Gun Control Mechanism	Ernst, H Sassen, B.	Navy
2,502,837	Position Indicating System	Entz, F. S Pullis, G. A. Stibitz, G. R.	Army
2,507,451	Flight Stabilizing Control Gyroscope	Molnar, J. P Carnvale, A.	Army
2,511,840	Self-Compensating Optical System for Telemeters.	Gardner, I. C	Army
2,512,153	Split-Field Dual-Power Telescope	Greenstein, J Henyey, L. G.	Army
2,516,290	Low Altitude Bombing Attachment	Barth, T. H	Navy
2,516,308	Variable Speed Induction Motor System.	Forrester, J Everett, R. R.	Navy
2,516,356	Automatic Range Tracking and Memory Circuit.	Tull, W. J Proctor, W.	Navy
2,521,904	Control-Transfer Circuit	Doak, J. B	Navy
2,522,536	Mechanical Acceleration Integrator	Rabinow, J	Navy
2,527,719	Dual Power Split-Field Anti-Tank Telescope.	Greenstein, J Henyey, L. G.	Army
2,531,421	Adjustable Rear Sight for Firearms	Garand, J. C	Army
2,534,397	Synchronizing Bomb Sight	Barth, T. H	Navy
2,549,030	Gun Fire Director	Stewart, D. J	Army
2,557,205	Panoramic Telescope for Guns	Riggs, L. A	Army
2,564,006	Precision Angle Marker	Haworth, L. J Sherwin, C. W.	Army
2,567,942	Direct Arithmetical Reading of Target Angle Values.	Kass, S Sperling, J. G.	Army
2,572,882	Mortar Sight Bracket and Sight	Roberts, E. C Davis, G. B.	Army
2,573,703	Boresighting Device	Gardner, I. C	Army
2,575,956	Train Parallax Computer	Hereford, F Whitehead, W.	Navy
2,576,331	Bombsight Computer	Close, R. N	Army
2,580,834	Depth Control System for Torpedoes	Prescott, H. L	Navy
2,581,138	Torpedo Director	Pitman, R. W	Navy
2,581,149	Fire Control	Shaw, C. H	Navy
2,585,933	Adjustable Rear Sight for Firearms	Harvey, E. M	Army
2,586,421	Computing Device	Evers, D. D	Navy
2,591,846	Parallax Corrector for Use in Gun Control.	Mann, A. K Mott-Smith, L. Quarles, L. R.	Navy
2,604,698	Tilt Correcting Director	Ewing, W. B	Navy
2,612,692	Gyroscopic Gun Sight	Weiss, H. K	Army

SUBGROUP 19-51—Small arms

The following patents relate to establishments engaged in manufacturing small firearms having a bore under 20 mm. (caliber .60 and under). Included are machine guns and other automatic arms, rifles, carbines, pistols, revolvers, shotguns, pyrotechnic pistols, and projectors, machine gun mounts, and parts for small firearms. Artillery and mortars having a bore of 20 mm. or over (or over .60 caliber), and component parts, are classified in Subgroup 19–11.

Patent No.	Title of Invention	Inventor	Agency
2,198,610	Extractor for Firearms	Garand, J. C	Army
2,287,032	Barrel and Gas Cylinder Assembly for Firearms.	Garand, J. C	Army
2.319,206	Machine for Rifling Guns	Bush, V	Army

Patent No.	Title of Invention	Inventor	Agency
2,330,210	Blank Ammunition Firing Attachment for Gas Operated Guns.	Garand, J. C.	Army
2,360,881	Collapsible Stock for Firearms	Lochhead, J. L.	Army
2,362,484	Pressure Gauge	Hickman, C. N.	Army
2,364,103	Recoil Mechanism	Simpson, C. E.	Army
2,364,630	Assembly Tool	Gilligan, C. W.	Army
2,366,684	Follower Mechanism	Garand, J. C.	Army
2,377,338	Firearm	Garand, J. C.	Army
2,379,461	Firearm	Simpson, C. E.	Army
2,380,965	Front Sight for Firearms	Harvey, E. M.	Army
2,388,296	Tripod	Simpson, C. E.	Army
2,404,889	Collocating Guage	Ringie, D. F.	Navy
2,417,080	Cartridge Feed System	Lochhead, J. L.	Army
2,423,854	Head Space Adjusting and Locking Means for Removable Firearm Barrels.	Simpson, C. E.	Army
2,425,359	Apparatus for Producing Tapered Electrodeposits.	Zavarella, A.	Army
2,425,749	Bolt Lock for Machine Guns	Lochhead, J. L.	Army
2,429,650	Front Sear for Rifles	Schiff, S.	Army
2,444,038	Combination Rear Sight and Ejector for Firearms.	Garand, J. C.	Army
2,449,551	Telescope Mount	Garand, J. C.	Army
2,451,473	Cheek Pad for Firearms	Cooper, E. G.	Army
2,458,647	Cocking Bolt of Machine Guns	Sampson, F. W. Hyde, G. J.	Army
2,459,158	Hammer Retarder for Automatic Firearms.	Garand, J. C.	Army
2,460,290	Cartridge Extractor Testing Machine.	Holcomb, N. P.	Army
2,462,091	Collapsible Stock for Firearm	Garand, J. C.	Army
2,462,114	Sear Release Mechanism	Lochhead, J. L.	Army
2,462,119	Gas Regulating Device for Firearms	Moore, C. A.	Army
2,465,962	Protection of Bore Surfaces of Guns	Allen, H. B. Smith, N. H.	Army
2,471,806	Thermostatic Electric Switch	Wilson, B. J. Machler, R. C. Polster, N. E. Murray, G. E.	Army
3,476,328	Operating Spring Retainer for Firearms.	Simpson, C. E.	Army
2,480,135	Handguard	Harvey, E. M.	Army
2,482,758	Fire Control Mechanism	Gaidos, A. F.	Army
2,489,283	Bipod	Garand, J. C.	Army
2,491,492	Buffer Mechanism for Firearms	Gaidos, A. F.	Army
2,498,052	Method of Retrading Erosion of Gun Barrels.	Smith, N. H.	Navy
2,499,944	Gun Tube Liner Material	Schairer, J. F. Brace, P. H. Marden, J. W.	Army
2,504,994	Reversible Feed Mechanism for Machine Guns.	Lochhead, J. L.	Army
2,548,622	Firing Mechanism for Submachine Guns.	Sampson, F. W. Hyde, G. J.	Army
2,551,061	Method of and Device for Grinding Interior Faces of Tubes.	Saccas, G. N. Simpson, F. R.	Army
2,554,618	Automatic Guns	Dixon, P. H.	Army
2,555,379	Breech Block Lock for Firearms	Simpson, C. E.	Army
2,565,527	Feeding Mechanism for Automatic Firearms.	Simpson, C. E.	Army
2,567,198	Receiver and Bolt Mechanism for Firearms.	Garand, J. C.	Army
2,571,132	Fire Control Mechanism for Firearms.	Harvey, E. M.	Army
2,576,015	Gun Charger	Humphrey, P. E.	AF
2,576,973	Transversely Sliding Breech Bolt Lock for Automatic Firearms.	Simpson, C. E.	Army
2,582,288	Breech Operating Mechanism for Automatic Firearms.	Simpson, C. E.	Army
2,582,989	Gas Piston for Firearms	Harvey, E. M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,584,121	Device for Contour Dressing Grinding Wheels.	Garand, J. C.	Army
2,585,933	Adjustable Rear Sight for Firearms	Harvey, E. M.	Army
2,587,611	Grenade Launcher Valve	Garand, J. C.	Army
2,589,227	Trigger Conversion Device	Colley, M. H.	Army
2,590,858	Rotatable Trigger Guard for Firearms.	Harvey, E. M.	Army
2,591,733	Extractor for Firearms	Simpson, C. E.	Army
2,594,359	Firing Mechanism for Automatic Firearms with Nonaxial Rectilinear Breechblock Motion.	Simpson, C. E.	Army
2,596,999	Alternate Feed Switch for Firearms	Hopkins, E. W.	Army
2,598,017	Gun Recoil Absorbing Mechanism	Rockwell, G.	Navy
2,607,148	Auxiliary Trigger Mechanism for Firearms.	Simpson, C. E.	Army
2,608,133	Electric Ammunition Assist Feeder Control.	Kuriloff, A. Ransom, M. R.	AF
2,610,425	Rotatable Trigger Guard for Firearms.	Moore, C. A.	Army
2,611,297	Means for Locking Firearm Barrels	Simpson, C. E.	Army
2,612,820	Adjusting Screw for Firearms	Cleveland, C.	Army

SUBGROUP 19–61—Small arms ammunition

The following patents relate to establishments engaged in manufacturing ammunition for small arms having a bore under 20 mm. (caliber .60 and under). Ammunition except for small arms is classified in Subgroups 19–21 and 19–29, blasting and detonating caps and safety fuses are found in Subgroup 28–26, and fireworks in Subgroup 39–85.

Patent No.	Title of Invention	Inventor	Agency
2,098,234	Cartridge Clip for Firearms	Garand, J. C.	Army
2,121,792	Cartridge Clips	Garand, J. C.	Army
2,232,071	Method of Manufacturing Metallic Cartridge Belt Links.	Laystrom, H. A.	Army
2,235,833	Cartridge Clip	Garand, J. C.	Army
2,261,627	Method and Means for Making Metallic Cartridge Links.	Laystrom, H. A.	Army
2,355,964	Die Structure for Metallic Cartridge Belt Links.	Fernlund, K. H. Hessler, J. O. Hultberg, A. E.	Army
2,355,992	Cartridge Belt Link Manufacture	Moinichen, P.	Army
2,405,098	Testing Machine for Metallic Cartridge Belt Links.	Persson, P. O. Spohr, C. W.	Army
2,420,147	Means and Method for Making Metallic Cartridge Belt Links.	Norgren, E.	Army
2,420,908	Metallic Cartridge Belt Link	Persson, P. O.	Army
2,421,486	Package of Cartridge Boxes	Dittmar, F. H.	Army
2,423,862	Binding and Covering Apparatus	Vorobik, C. E.	Navy
2,426,448	Metallic Cartridge Belt Link	Goldfisher, F.	Army
2,432,706	Propellant Retainer	Anderson, N. Hall, R. R.	Army
2,440,267	Propellant and Process for Manufacturing.	Hale, G. C.	Army
2,441,388	Projectile	Blackinton, G. Calhoun, J. J.	Army
2,441,897	Method of and Apparatus for Exploding Armor Piercing Projectiles.	Nichols, H. J.	Navy
2,459,175	Explosive Bullet	Moore, W. T.	Army
2,472,118	Explosive Bullet	Moore, W. T. Nelson, R. N.	Army
2,472,817	Cartridge Belt Link	Gaidos, A. F.	Army
2,475,632	Bullet	Moore, W. T. Thibodeau, W.	Army
2,482,089	Method of Making a High-Density Explosive.	Audrieth, L. F. Sager, D. D.	Army
2,482,090	Method of Making a High-Density Explosive.	Audrieth, L. F. Sager, D. D.	Army
2,482,091	Method of Making a High-Density Explosive.	Audrieth, L. F. Sager, D. D.	Army
2,488,531	Cartridge Link	Gaidos, A. F.	Army

Patent No.	Title of Invention	Inventor	Agency
2,520,396	Die Structure for Metallic Cartridge Belt Links.	Goldfisher, F.	Army
2,532,323	Bullet	Miller, G. A.	Army
2,603,156	Shock-Resistant Product	Lathrop, E. C. Naffziger, T. R.	USDA
2,608,900	Cartridge Belt Assembly Tool	Kunz, W. R.	Army

SUBGROUP 19–99—Ordnance and accessories, not elsewhere classified

The following patents relate to establishments engaged in manufacturing torpedo tubes, Y-guns, flame throwers, and other ordnance and accessories not elsewhere classified.

Patent No.	Title of Invention	Inventor	Agency
2,255,043	Fuse Setting Machine	Beatty, G. W.	Army
2,286,286	Machine for Testing Metallic Cartridge Belt Links.	Laystrom, H. Persson, P. O.	Army
2,297,538	Liquid Oxygen Explosive	Denues, A. R.	Int
2,362,502	Pyrotechnic Compositions	Schladt, G. J.	Army
2,369,142	Ground Signal Projector	Gilligna, C. W.	Army
2,388,296	Tripod	Simpson, C. E.	Army
2,391,012	Bomb Release	Eyler, L. J.	AF
2,395,252	Impact Operated Release Mechanism.	Carpenter, T.	Navy
2,395,782	Unshorting Switch	Good, W. A.	Navy
2,395,998	Battery Removing Tool	Falk, G. E.	Navy
2,398,458	Impact Testing Device	Zavarella, A. McPheters, L. L.	Army
2,398,927	Self-Propelling Projectile	Farr, W. W.	Army
2,398,928	Reaction Propulsion Device	Farr, W. W.	Army
2,402,809	Projectile	Farr, W. W.	Army
2,403,012	Magazine Loader	McPheters, L. L.	Army
2,404,190	Cage Member	Pope, W. B.	Army
2,405,415	Rocket Projectile	Eksergian, C.	Army
2,405,447	Feed Structure for Cartridge Belt Links.	Persson, P. O. Spohr, C. W.	Army
2,406,560	Rocket Motor	Pope, W. B.	Army
2,409,380	Spotting Projectiles	Nichols, H. J.	Navy
2,409,635	Mine Destroyer	Langner, L.	Army
2,412,134	Projectile	Eksergian, C.	Army
2,412,173	Projectile	Pope, W. B.	Army
2,412,266	Reaction Propelled Device	Hoagland, R.	Army
2,414,579	Rocket Launcher for Aircraft	Anderson, C. Leighton, R. Wilts, C. H. Melzian, A. L.	Navy
2,421,522	Rocket Projector and Projectile	Pope, W. B.	Army
2,421,552	Casing and Nozzle Construction for Rocket Motors.	Eksergian, C.	Army
2,422,720	Rocket Projectile	Eksergian, C.	Army
2,422,721	Rocket Projectile	Farr, W. W.	Army
2.423,854	Head Space Adjusting and Locking Means for Removable Firearm Barrels.	Simpson, C. E.	Army
2,424,390	Switch	Ferris, R. G.	Navy
2,427,217	Rocket Fin Assembly	Lebherz, H. J.	Army
2,428,761	Support for Rocket Launchers	Richards, L. A.	Navy
2,429,021	Barrage Rocket Projector	Gould, A. S. Lindvall, F. C.	Navy
2,430,636	Rocket Launcher	Gould, A. S.	Navy
2,430,896	Rocket Stabilizing Fins	Uhl, E. G. Skinner, L. A.	Army
2,434,652	Igniter	Hickman, C. N.	Army
2,438,281	Method for Processing Plastic Sheets	Gordon, S.	Army
2,440,271	Rocket Projectile	Hickman, C. N.	Army
2,440,305	Rocket Projectile	Skinner, L. A.	Army
2,442,369	Rifling Band	McBride, E. T.	Army

Patent No.	Title of Invention	Inventor	Agency
2,442,386	Safety for a Firearm Hammer Mechanism.	Uhl, E. G	Army
2,443,041	Fuse	Jordan, J. D	Navy
2,444,957	Flash Reducer	Skinner, L. A	Army
2,446,537	Thrust Gauge	Hickman, C. N	Army
2,446,560	Rocket Charge Suspension Arrangement.	Skinner, L. A	Army
2,448,203	Powder tester	Africano, A	Army
2,449,625	Die Assembly	Stuart, J	Army
2,451,522	Rocket Projector	Uhl, E. G Skinner, L. A.	Army
2,452,892	Igniter for Rockets	Appleton, R. A Bjork, C. F. Hickman, C. N.	Army
2,455,361	Grenade Launcher	Garand, J. C	Army
2,457,839	Rocket	Skinner, L. A	Army
2,458,475	Rocket Device	Lauritsen, C. C McMorris, J.	Navy
2,458,476	Rocket Launcher	Lauritsen, C. C McMorris, J.	Navy
2,459,159	Mechanism for Traversing Artillery Piece.	Glassman, N. S	Army
2,459,163	Thermal Igniter	Hickman, C. N	Army
2,459,687	Aerial Signal	Decker, J. B	Navy
2,460,163	Projectile Flight Recording Multiple Exposure Camera.	Bowen, I. S	Navy
2,460,289	Rocket Projectile	Hickman, C. N	Army
2,460,321	Apparatus for Launching Rockets from Turrets.	Walker, B	Army
2,460,929	Rocket Holding Device	Goff, M. R	Army
2,460,954	Cutting Machine	Stuart, J	Army
2,461,574	Firing Mechanism	Skinner, L. Folse, J. A.	Army
2,462,099	Rocket Projectile	Hickman, C. N	Army
2,462,135	Rocket Primer	Skinner, L. A	Army
2,463,200	Indirect Sighting Instrument for Rockets.	Pitzer, K. S	Army
2,464,179	Smokeless Powder Tester	Hickman, C. N Dempster, A. J.	Navy
2,464,181	Rocket Device	Lauritsen, C. C	Navy
2,465,401	Rocket Fin Assembly	Skinner, L. A	Army
2,465,402	Rocket Launcher Firing Mechanism	Skinner, L. A Folse, J. A.	Army
2,465,437	High-G Centrifuge	Engelhardt, G	Army
2,466,729	Fuse	Nelson, C. F	Army
2,466,752	Electrically Fired Rocket Projectile	Uhl, E. G Skinner, L. A.	Army
2,468,120	Air Turbine-Generator for Fuses	Senn, J. A	Army
2,469,350	Rocket Device	Luritsen, C. C	Navy
2,470,139	Camera Shutter	Campbell, A. W	Army
2,470,162	Rocket-Propelled Device	Goehmann, M	Army
2,471,583	Stabilization of Nitrocellulose	Reeves, R. E Giddens, J.	USDA
2,471,745	Spacer Trap for Rockets	Hickman, C. N	Army
2,472,366	Thermal Time Delay	Brode, R. B	Navy
2,472,379	Battery Electrolyte with Phosphoric Acid.	Lawson, H. E	Navy
2,473,114	Harness	Todd, E. T	Army
2,475,730	Projectile Offset	Wandrey, C. W	Army
2,476,479	Tank-Wall Grenade Mounting	Brack, D. L	Army
2,477,507	Electrical Pressure Gauge	Africano, A	Navy
2,477,989	Safety Jacket	LaMaida, T	Army
2,478,659	Apparatus for Erosion Testing	Jackson, L. R Ramaley, E. J.	Army
2,478,774	Rocket Launching Device	Meinel, A. B	Army
2,479,718	Rocket Projectile	Bjork, C. F Woods, J. M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,479,808	Electromagnetic Apparatus for Measuring Projectile Velocity During Penetration.	Beth, R. A.	Army
2,481,059	Adjustable Rocket Nozzle	Africano, A.	Army
2,481,542	Displacement Launcher for Projectiles.	Schuyler, G.	Navy
2,482,130	Flying Target Unit	Skinner, L. A.	Army
2,483,385	Limit Stop Mechanism for Power Operated Gun Mounts	Humphrey, P. E.	AF
2,485,601	Multiple Cartridge Launcher	Hickman, C. N.	Army
2,485,870	Rocket Target	Edson, J. B.	Navy
2,485,909	Rocket Carrier	Mosteller, G.	Navy
2,485,954	Staking Tool	Burrell, E.	Navy
2,485,977	Stress Measuring Device	Mains, R. M.	Navy
2,487,053	Obturator Trap for Rocket Propellants.	Hickman, C. N.	Army
2,488,154	Strip Propellant for Rocket Projectiles	Africano, A.	Army
2,489,283	Bipod	Garand, J. C.	Army
2,490,349	Rocket Projectile	Golden, S.	Army
2,492,835	Trap Wire Igniter	Bjork, C. F.	Army
2,493,725	Partial Burning Apparatus	McMorris, J.	Army
2,495,216	Method of Manufacturing Propellants.	Longwell, P. A. Ayers, A. D. Sage, B. H.	Navy
2,496,316	Rocket Projector	Uhl, E. G. Skinner, L. A.	Army
2,497,888	Means for Preventing Excessive Combustion Pressure in Rocket Motors.	Hirschfelder, J.	Army
2,498,026	Mercury Switch Tester	Brown, C. F.	Navy
2,498,043	Fuse	Lauritsen, C.	Navy
2,498,045	Deceleration Apparatus	Looney, C. T. Howell, L. G. Johnston, B. G.	Navy
2,498,388	Explosive Composition	Ball, A. M.	Army
2,499,295	Art of Making Propellant Powder	Bruce, D. S. Klien, E. L.	Army
2,499,944	Gun Tube Liner Material	Schairer, J. F. Brace, P. H. Marden, J. W.	Army
2,502,458	Trap for Rocket Propellants	Hickman, C. N.	Army
2,503,269	Rocket Propelled Illuminating Flare	Hickman, C. N.	Army
2,503,270	Trap for Rocket Propellants	Hickman, C. N.	Army
2,503,271	Rocket Projectile	Hickman, C. N.	Army
2,503,684	Jet Adjusting Means	Pope, W. B.	Army
2,504,160	Rocket Projector	Skinner, L. A. Folse, J. A.	Army
2,509,903	Antenna and Oscillator Coil Unit	Brode, R. B. Ferris, R. G.	Navy
2,509,943	Marker Flare	Silvey, G. A.	Navy
2,510,110	Step-Motor Rocket Projectile	Hickman, C. N.	Army
2,510,147	Side Venting Rocket	Skinner, L. A.	Army
2,512,256	Gunnery Training Device	O'Connor, A. L.	AF
2,512,622	Firearm Container	Fish, S. W.	Army
2,513,158	Cavity Liner	Foley, N. D.	Navy
2,514,297	Apparatus for Observing the Conduct of a Projectile in a Gun.	Smith, N. M. Crocker, J. A.	Navy
2,514,434	Electrical Detonator	Windes, S. L.	Int
2,515,040	Fuse	Hatcher, J. B.	Navy
2.515,043	Safety Switch	Jordan, J. D.	Navy
2,515,048	Multiple Rocket Motor	Lauritsen, C. C.	Navy
2,515,049	Rocket Motor Relief Means Construction.	Lauritsen, C. C. Wilson, O. C.	Navy
2,515,051	Rocket Launcher	Lloyd, P. E.	Navy
2,515,068	Fuel Valve	Young, C. T.	Navy
2,516,902	Telescopic Gun for Aircraft Personnel Catapult and other Uses.	Musser, C. W.	Army
2,517,106	Cutting Tool for Emptying Shells	Hamlin, D. W.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,517,133	Apparatus for Determining Conditions within a Gun Barrel.	Porter, H. H	Navy
2,520,814	Impulse Emitting Device	Rule, B. H	Navy
2,521,918	Decelerometer	Lindvall, F. C Hudson, D. E.	Navy
2,523,474	Apparatus for Measuring Transverse Accelerations.	Mason, H. A	Navy
2,528,575	Altitude Responsive Control Device	Broadbent, J	Navy
2,528,945	Dispensing Device	Carpenter, T	Navy
2,529,271	Marine Anchorage Means	Winter, C. P	Navy
2,529,465	Multiple Grain Rocket for Propelling Underwater Torpedoes.	Wallace, R. W Colburn, W. E.	Navy
2,530,454	Pyrotechnic Device	Fieser, L. F Van Lownen, W.	Army
2,532,643	Rocket Launcher	Richards, L Lindvall, F. C.	Navy
2,545,217	Rocket Launcher	Walker, E. C	Navy
2,547,309	Pneumatically Actuated Operator for Removing Rip Covers from Tanks.	Elmer, W. B Rimer, R. R.	Navy
2,550,072	Rocket Launcher	Lindvall, F. C	Navy
2,557,151	Rocket Projector	Skinner, L. A Folse, J. A.	Army
2,568,455	Rocket Launcher	Lindvall, F. C Lloyd, P. E.	Navy
2,573,830	Impulse Testing Device	Boykin, R. O	Navy
2,573,843	Pneumatic Gauging Device	Hendrix, D. O Langer, R. M.	Navy
2,574,600	Decelerometer	Stokes, R. R	Navy
2,575,071	Explosive Operated Device	Rockwell, G. O	Navy
2,581,096	Rocket Launcher	Gould, A. S	Navy
2,586,228	Pyrotechnical Device	Hershberg, E Coburn, E. R.	Army
2,586,861	Arming Cover for Fuses	Rabinow, J	Army
2,587,611	Grenade Launcher Valve	Garand, J. C	Army
2,587,672	Automatic Revolving Chamber Rocket Launcher.	Whitson, W. L	Army
2,593,402	Gunrack	Aitchison, J Bonkemeyer, A.	Army
2,598,001	Rocket Launcher	Kunz, G	Navy
2,598,017	Gun Recoil Absorbing Mechanism	Rockwell, G. O	Navy
2,599,555	Aircraft Rocket Launcher	Hurt, P. F	Navy
2,600,492	Cartridge Belt Link	Dixon, P. H	Army
2,601,135	Firearm with Time Delay	Hammar, G. W	Army
2,601,778	Free Piston Impulse Blast Gauge	Gordon, W. E	Army
2,603,061	Rocket Loading Arrangement	Avery, W. H	Navy
2,603,155	Shock Wave Actuated Photoflash Bomb.	Clarke, R. G Derbyshire, H. Edwards, H. S. Shore, F. J.	Army
2,603,369	Hydraulic Bomb Lift Truck	Soderstrom, H	AF
2,603,607	Smoke Generating Device	Stevenson, R	Army
2,604,014	Missile Launcher	Walker, E. C Elliott, R. B. Bascom, J. D.	Navy
2,604,644	Corner Reflector Float Marker	Tilton, P. D	Navy
2,605,607	Trap for Rocket Propellent	Hickman, C. N	Army
2,606,107	Incendiary Gels	Fieser, L. F	Army
2,608,132	Rocket Launcher for Retro-Bombing Apparatus.	Lauritsen, C	Navy
2,608,134	Aircraft Gun Port Opening and Closing Device Controlled by Gun Temperature.	Beachler, R Oberholtzer, J.	AF
2,612,389	Valved Pipe Coupling	MacGlashan, W	Army
2,614,083	Metal Chloride Screening Smoke Mixture.	Bailar, J. C Parry, R. W.	Navy
2,615,396	Munition	Hershberg, E. B Fieser, L. F	Army

MAJOR GROUP 20—FOOD AND KINDRED PRODUCTS

The patents listed under this title relate generally to the manufacture of foods and beverages for human consumption. Included are prepared feeds for animals and fowls.

SUBGROUP 20–11—Meat packing

The following patents relate to establishments engaged in the slaughtering of cattle, hogs, sheep, lambs, calves, and other animals, for meat to be sold fresh or to be used in canning and curing, and in making sausage, lard, and other products.

Patent No.	Title of Invention	Inventor	Agency
2,349,836	Process for the Curing and Preservation of Animal and Fish Products.	Stuart, L. S.	USDA
2,406,395	Process of Dehydrating Meats Containing Fats in a Fluid Current.	Noel, W. A.	USDA

SUBGROUP 20–13—Sausages and other prepared meat products

The following patents relate to establishments engaged in manufacturing sausages, prepared meats, and meat specialties.

Patent No.	Title of Invention	Inventor	Agency
2,368,435	Antioxidant	Wells, P. A. Riemenschneider, R. W.	USDA
2,383,816	Alkali Compounds Containing Antioxidant Compositions.	Riemenschneider, R. W. Turer, J.	USDA
2,397,920	Stabilization of Oils and Fats	Coe, M. R., Jr. Coe, M. R., Sr.	USDA
2,457,063	Dehydrated Meat Scrapple and Method of Making the Same.	Morgan, A. F. Watts, B. M.	Army

SUBGROUP 20–14—Sausage casings

The following patent relates to establishments engaged in manufacturing sausage casings from animal or synthetic materials.

Patent No.	Title of Invention	Inventor	Agency
2,517,595	Coating of Foods with Pectinate Films.	Owens, H. S. Schultz, T. H.	USDA

SUBGROUP 20–21—Creamery butter

The following patents relate to establishments engaged in manufacturing creamery butter.

Patent No.	Title of Invention	Inventor	Agency
2,373,192	Antioxidants	Lauer, W. M.	USDA
2,375,250	Antioxidant Compositions	Riemenschneider, R. W. Turer, J.	USDA
2,472,119	Stabilization of Butter	Mueller, W. S.	Army

SUBGROUP 20–22—Natural cheese

The following patent relates to establishments engaged in manufacturing all types of natural cheese.

Patent No.	Title of Invention	Inventor	Agency
2,585,951	Food Product from Whey	Malkames, J. P.	USDA

SUBGROUP 20–23—Condensed and evaporated milk

The following patents relate to establishments engaged in manufacturing condensed and evaporated milk, and related products such as sweetened condensed milk (case and bulk goods); unsweetened condensed and evaporated milk; condensed and evaporated buttermilk; dried and powdered skim milk, whole milk, whey, and buttermilk; and ice-cream mix and ice-milk mix made for sale as such.

Patent No.	Title of Invention	Inventor	Agency
2,132,712	Fermentation Process for the Manufacture of Dextro-Lactic Acid.	Ward, G. E. Lockwood, L. B. May, O. E.	USDA
2,438,208	A Continuous Process of Converting Lactic Acid to Polylactic Acid.	Filachione, E. M. Fisher, C. H.	USDA
2,445,115	Heat Exchanger	Hanrahan, F. P.	USDA
2,460,891	Separation of Proteins from Milk Products.	Leviton, A.	USDA
2,621,128	Dried Honey-Milk Product	Webb, B. H. Walton, G. P.	USDA

SUBGROUP 20–24—Ice cream and ices

The following patents relate to establishments engaged in manufacturing ice cream, ices, and other frozen desserts.

Patent No.	Title of Invention	Inventor	Agency
2,131,650	Fruit Whip and Process for the Preparation Thereof.	Webb, B. H	USDA
2,522,504	Gluten Phosphates and Method for Preparing Them.	Ferrel, R. E Olcott, H. S.	USDA

SUBGROUP 20–25—Special dairy products

The following patents relate to establishments engaged in manufacturing special dairy products, including processed and ladle butter, malted milk, and fermented milk; and processed cheese, cheese pastes, and spreads made from natural cheese.

Patent No.	Title of Invention	Inventor	Agency
2,116,931	Process for the Recovery of Lactose from Whey.	Leviton, A	USDA
2,129,222	Process for the Recovery of Soluble Protein Powder from Whey.	Leviton, A	USDA
2,131,650	Fruit Whip and Process for the Preparation Thereof.	Webb, B. H	USDA
2,572,026	Separation of Alpha-Casein from Whole Casein.	Hipp, N. J Groves, M. L. McKeekin, T. L.	USDA
2,585,951	Food Product from Whey	Malkames, J. P	USDA

SUBGROUP 20–32—Cured fish

The following patent relates to establishments engaged in smoking, salting, drying, or otherwise curing fish.

Patent No.	Title of Invention	Inventor	Agency
2,349,836	Process for the Curing and Preservation of Animal and Fish Products.	Stuart, L. S	USDA

SUBGROUP 20–33—Canned fruits, vegetables, and soups; preserves, jams, and jellies

The following patents relate to establishments engaged in canning fruits and vegetables, and fruit and vegetable juices (including soups), and in manufacturing preserves, jams, and jellies.

Patent No.	Title of Invention	Inventor	Agency
2,097,479	Removing Skin from Fruits	Taylor, R. B	TVA
2,131,650	Fruit Whip and Process for the Preparation Thereof.	Webb, B. H	USDA
2,209,020	Maturity Testing Device	Billman, L. M DeGroot, A. E.	USDA
2,373,729	Thickening and Congealing Agent	Willaman, J. J Wickard, C. R.	USDA
2,445,881	Apparatus for Peeling Onions, Including a Conical Jet of Gas.	Hemmeter, G. T	USDA
2,453,109	Method of Preparing Full Flavored Fruit Juice Concentrates.	Atkins, C. D MacDowell, L. G. Moore, E.	USDA
2,457,315	Volatile Flavor Recovery Process	Milleville, H. P	USDA
2,457,560	Pectic Enzyme Preparations Fortified with Pectinesterase.	Jansen, E. F Lineweaver, H.	USDA
2,459,431	Cold Processed Fruit Spread	Johnson, G Boggs, M. M.	USDA
2,475,838	Treatment of Fruits to Prevent Browning.	Johnson, G Guadagni, D. G.	USDA
2,476,251	Process for Pasteurization and Enzyme Inactivity of Fruits by Electronic Heating.	Swenson, T. L	USDA
2,479,745	Process for the Production of Apple Essence.	Homiller, R. P Griffin, E. L.	USDA
2,496,261	Preparation of Beta-Amylase from Sweet Potatoes.	Balls, A. K Walden, M. K. Thompson, R. R.	USDA
2,496,278	Process of Drying Fruit or Vegetable Materials Containing Added Methyl Cellulose.	Eddy, C. W	USDA
2,510,138	Citrus Juices and Removal of Volatile Oils Therefrom.	Pulley, G. N Velkhuis, M. K.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,531,531	Method of Preparing Calcium Firmed Frozen Apple Slices.	Hills, C. H	USDA
2,534,263	Method of Firming Fruit and Vegetable Slices.	Hills, C. H	USDA
2,563,855	Method for Improving Fruit Products	McColloch, R. J Beavens, E. A.	USDA
2,573,750	Crystallized Fruit Spread and Process for Making Same.	White, J. W	USDA
2,594,308	Potato Juice	Heisler, E. G Treadway, R. H.	USDA

SUBGROUP 20–34—Dried and dehydrated fruits and vegetables

The following patents relate to establishments engaged in sun-drying or artificially dehydrating fruits and vegetables, including packaged soup mix prepared from dehydrated ingredients.

Patent No.	Title of Invention	Inventor	Agency
2,360,108	High-Frequency Desiccator	Christie, A	USDA
2,361,151	Cooker and Dehydrator	Reed, J. O	USDA
2,370,422	Dehydrators	Reed, J. O	USDA
2,399,696	Combination Sunlight or Artificial Heat Dehydrator and Hotbed.	Schreiber, W. T	USDA
2,477,605	Process for Preserving Foods	Howard, L. B Ramage, W. D. Rasmussen, C. L.	USDA
2,496,278	Process of Drying Fruit or Vegetable Materials Containing Added Methyl Cellulose.	Eddy, C. W	USDA
2,507,550	Method of Cooling Compressed Blocks of Dehydrated Vegetable Matter.	Smith, G. S	USDA
2,517,595	Coating of Foods with Pectinate Films.	Owens, H. S Schultz, T. H.	USDA
2,522,513	Apparatus for Blanching Deep Beds of Vegetables.	Hemmeter, G. T	USDA
2,557,155	Drying of Fruit or Vegetable Materials.	Strashun, S. I	UDSA
2,619,424	Preparation of Dehydrated Carrots	Masure, M. P	USDA

SUBGROUP 20–35—Pickled fruits and vegetables; vegetable sauces and seasonings; salad dressings

The following patents relate to establishments engaged in pickling, brining, and sulphuring fruits and vegetables, and in manufacturing salad dressings, vegetable relishes, sauces, and seasonings. Included are pickles; ketchup; brined and sulphured fruits and vegetables; prepared horseradish; sauerkraut in bulk; prepared mustard; tomato chili sauce and other vegetable sauces; mayonnaise; cooked salad dressings and raw salad dressings.

Patent No.	Title of Invention	Inventor	Agency
2,373,729	Thickening and Congealing Agent	Willaman, J. J	USDA
2,450,615	Method of Reducing Scald Development on Fruit.	Schomer, H. A	USDA

SUBGROUP 20–37—Frozen fruits, vegetables, and sea foods

The following patents relate to establishments engaged in quick-freezing and cold-packing vegetables, fruits, fish, and shellfish.

Patent No.	Title of Invention	Inventor	Agency
2,085,051	Treating Green Corn	Taylor, R. B	TVA
2,097,479	Removing Skin from Fruit	Taylor, R. B	TVA
2,164,362	Freezing Foods	Taylor, R. B	TVA
2,172,417	Washing Food with Refrigerant	Taylor, R. B	TVA
2,172,418	Separating Refrigerant from Frozen Foods.	Taylor, R. B	TVA
2,225,669	Purification of Refrigerant	Taylor, R. B	TVA
2,304,860	Apparatus for Freezing Foods	Taylor, R. B	TVA
2,324,517	Apparatus for Freezing Foodstuffs	King, D. W	TVA
2,339,300	Refrigerant Composition	Taylor, R. B	TVA
2,342,706	Freezing Foodstuff	Tankersley, J. O	TVA
2,379,459	Temperature Indicator	Schreiber, R. P Raymond, P. Lee, W. M.	Army
2,442,928	Food Products and Method of Making Them.	MacMasters, M.M. Hilbert, G. E.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,459,431	Cold Processed Fruit Spread	Johnson, G. Boggs, M. M.	USDA
2,475,838	Treatment of Fruits to Prevent Browning.	Johnson, G. Guadagni, D. G.	USDA
2,476,251	Process for Pasteurization and Enzyme Inactivity of Fruits by Electronic Heating.	Swenson, T. L.	USDA
2,477,605	Process for Preserving Foods	Howard, L. B. Ramage, W. D. Rasmussen, C. L.	USDA
2,522,513	Apparatus for Blanching Deep Beds of Vegetables.	Hemmeter, G. T.	USDA
2,531,431	Method of Preparing Calcium Firmed Frozen Apple Slices.	Hills, C. H.	USDA
2,534,263	Method of Firming Fruit and Vegetable Slices.	Hills, C. H.	USDA
2,542,068	Sucrose Polyhydrate Glazing of Fruit.	Young, F. E. Jones, F. T.	USDA
2,560,537	Defrosting Indicator	Andersen, A. A.	USDA
2,573,699	Process for Making Frozen Concentrated Fruit Juices.	Eskew, R. K. Homiller, R. P. Phillips, G. W.	USDA

SUBGROUP 20–41—Flour and other grain-mill products

The following patents relate to establishments engaged in milling flour or meal from grain, except rice (Subgroup 20–44). Such flour and grain mills may also produce cracked grain used as cereal or stock dry feed, or blended and prepared flours, principally from products ground in the same establishment. Included are wheat flour (white; semolina; farina; granular; graham; whole-wheat); rye, buckwheat, corn, and other flour; corn meal; corn grits and flakes for brewers' use; bran and middlings; and stock dry feed.

Patent No.	Title of Invention	Inventor	Agency
2,313,504	Sulphydryl Compound Obtained from Flour.	Balls, A. K. Hale, W. S.	USDA
2,381,421	Method of Treating Cereal Grains	Balls, A. K. Hale, W. S.	USDA
2,425,094	Process for Obtaining Rutin from Buckwheat.	Griffin, E. L.	USDA
2,478,168	Process for Obtaining Rutin from Buckwheat.	Eskew, R. K.	USDA
2,527,585	Wet Milling of Grain Sorghum	Slotter, R. L. Anderson, R. A.	USDA
2,567,980	Drying Wet Wheat Gluten	Tuomy, J. M. Slotter, R. L.	USDA
2,571,095	Method of Prevention of Deterioration in Seeds.	Altschul, A. M. Condon, M. Z. Lambou, M. G.	USDA
2,585,978	Method of Stabilizing Rice Products.	Van Atta, G. R. Kester, E. B. Olcott, H. S.	USDA
2,592,585	Corn Milling Test	Rist, C. E. MacMasters, M. M. Baird, P.	USDA
2,611,703	Production of Stabilized Forage Crops.	Thompson, C. R.	USDA

SUBGROUP 20–42—Prepared feeds for animals and fowls

The following patents relate to establishments engaged in manufacturing prepared feeds for animals and fowls. Prepared feeds include those made from milled grains; animal, marine, and vegetable proteins; alfalfa meals, bone meal, calcium carbonate, manganese, and other mineral supplements; fish liver oils, distillers' solubles, and other vitamin supplements. Stock dry feeds are classified in Subgroup 20–41.

Patent No.	Title of Invention	Inventor	Agency
2,044,774	Treating Phosphate Rock to Eliminate Fluorine.	Curtis, H. A.	TVA
2,108,940	Process for Making Di-Calcium Phosphate.	MacIntire, W. H.	TVA
2,474,339	Keratin Derivatives and Process of Preparation Thereof.	Ward, W. H. Binkley, C. H.	USDA
2,475,261	Starch Recovery Process	Slotter, R. L. Tuomy, J. M.	USDA
2,542,984	Method of Solubilizing Keratin	Binkley, C. H.	USDA
2,562,970	Preservation of Forage Crops	Thompson, C. R.	USDA
2,581,342	Water-Soluble Combination Products of Gossypol and Proteins.	Altschul, A. M. Castillon, L. E.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,607,768	Isolation of Pea Proteins	McCready, R. M. Silveira, V. G.	USDA
2,611,703	Production of Stabilized Forage Crops.	Thompson, C. R.	USDA
2,614,933	Separation of Pear Waste into Its Liquid and Solid Components.	Graham, R. P. Thompson, J. H. Shepherd, A. D.	USDA
2,617,728	Recovery of Values from Waste Cantaloupe.	Van Atta, G. R.	USDA

SUBGROUP 20–43—Cereal preparations

The following patents relate to establishments engaged in manufacturing breakfast foods, coffee substitutes, and other cereal preparations from grain. Cracked grain is classified in Subgroup 20–41.

Patent No.	Title of Invention	Inventor	Agency
2,592,585	Corn Milling Test	Rist, C. E. MacMasters, M. M. Baird, P.	USDA
2,616,808	Production of Expanded Rice Products.	Roberts, R. L.	USDA

SUBGROUP 20–44—Rice cleaning and polishing

The following patents relate to establishments engaged in cleaning and polishing rice, and in manufacturing rice flour or meal. Important products include brown rice, miller rice (including polished rice), rice polish, rice bran, and rice flour.

Patent No.	Title of Invention	Inventor	Agency
2,510,164	Water-Insoluble Derivatives of Nicotinic Acid and Process for Preparing Them.	Woodward, C. F. Badgett, C. O.	USDA
2,510,945	N-Cyclohexyl Nicotinamide	Badgett, C. O. Woodward, C. J.	USDA
2,513,351	Preparation of Gluten Phosphates	Olcott, H. S. Mohammad, A.	USDA
2,538,007	Stabilization of Brown Rice	Kester, E. B.	USDA
2,585,036	Preparation of Novel Food Products From Rice.	Roberts, R. L.	USDA
2,610,124	Production of Quick-Cooking Rice	Roberts, R. L.	USDA
2,616,808	Production of Expanded Rice Products.	Roberts, R. L.	USDA

SUBGROUP 20–51—Bread and other bakery products

The following patents relate to establishments engaged in manufacturing bread, cakes, hand-made cookies, doughnuts, pies, pastries, and similar "perishable" bakery products.

Patent No.	Title of Invention	Inventor	Agency
2,442,928	Food Products and Method of Making Them.	MacMasters, M.M. Hilbert, G. E.	USDA
2,495,706	Vegetable Gel	DeVoss, L. I. Beckel, A. C. Belter, P. A.	USDA
2,496,261	Preparation of Beta-Amylase from Sweet Potatoes.	Balls, A. K. Walden, M. K. Thompson, R. R.	USDA
2,587,600	Purification of Rutin	Couch, J. F. Krewson, C. F.	USDA

SUBGROUP 20–61—Cane sugar

The following patents relate to establishments engaged in manufacturing raw sugar, sirup, or finished (granulated or clarified) cane sugar from sugar cane. The refining of sugar is classified in Subgroup 20–62.

Patent No.	Title of Invention	Inventor	Agency
2,043,911	Process of Treating Sugar Juices	Ventre, E. K.	USDA
2,280,085	Sugar from Sorghum Juices	Ventre, E. K.	USDA
2,333,638	Process of Packaging Dehydrated Molasses.	Chalkley, L.	Com
2,345,079	Process for the Production of Aconitic Acid.	Ventre, E. K. Henry, H. C. Gayle, F.	USDA
2,359,537	Process for the Extraction of Aconitic Acid from Plant Juices.	Ventre, E. K. Ambler, J. A. Byall, S. Henry, H. C.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,421,380	Method of Treating Sugar	Isbell, H. S	Com
2,450,586	Process for Saccharifying Plant Materials.	Dunning, J. W Lathrop, E. C.	USDA
2,452,093	Purification of Hard Waxes by Removal of Soft Fatty Components.	Balch, R. T	USDA
2,469,090	Extraction of Aconitic Acid from Sugar Cane.	Ventre, E. K	USDA
2,481,557	Separation of Aconitic Acid from Molasses.	Ambler, J. A Roberts, E. J.	USDA

SUBGROUP 20–62—Cane sugar refining

The following patents relate to establishments engaged in refining raw sugar and processing sugar sirup.

Patent No.	Title of Invention	Inventor	Agency
2,381,420	Hard Waxes and Fatty Products Derived from Crude Sugar Cane Waxes.	Balch, R. T	USDA
2,421,380	Method of Treating Sugar	Isbell, H. S	Com
2,449,107	Process of Making Refined Sugar-Cane Wax.	Broeg, C. B Balch, R. T.	USDA
2,549,840	Separation and Fractionation of Sugars.	Montgomery, E. M. Weakley, F. B.	USDA

SUBGROUP 20–71—Cocoa, candy, and other confectionery products

The following patents relate to establishments engaged in manufacturing cocoa and cocoa products and confections such as chocolate candies, chocolate-covered bars, candied and crystallized fruits, candy-covered nuts, salted nuts, and related products.

Patent No.	Title of Invention	Inventor	Agency
2,442,928	Food Products and Method of Making Them.	MacMaster, M. M. Hilbert, G. E.	USDA
2,444,241	Soy Whip	Beckel, A. C DeVoss, L. I. Belter, P. A. Smith, A. K.	USDA
2,457,577	Production of Low-Methoxyl Pectinic Acids from Aluminum-Pectin Compositions.	Maclay, W. D Shepherd, A. D. McCready, R. M. Graham, R. P.	USDA
2,517,595	Coating of Foods with Pectinate Films.	Owens, H. S Schultz, T. H.	USDA
2,576,952	Apparatus for Spray Coating Particles.	Lowe, E Swenson, H. A.	USDA
2,584,150	Preparation of Nutlike Products from Dry Beans.	Morris, H. J	USDA
2,611,708	Method of Coating Foods with Pectinate or Pectate Films.	Owens, H. S Schultz, T. H.	USDA

SUBGROUP 20–81—Bottled soft drinks and carbonated waters

The following patents relate to establishments engaged in manufacturing bottled soft drinks and carbonated water. Fruit and vegetable juices are classified in Subgroup 20–33 and fruit sirups for flavoring in Subgroup 20–95.

Patent No.	Title of Invention	Inventor	Agency
2,318,641	Fermentation Process for the Production of 5-Ketogluconic Acid.	Stubbs, J. J Lockwood, L. B. Roe, E. T. Ward, G. E.	USDA
2,422,455	Methods of Preparing a Diastatic Agent.	Wickerham, L. J	USDA

SUBGROUP 20–83—Malt

The following patents relate to establishments engaged in manufacturing malt from barley or other grains.

Patent No.	Title of Invention	Inventor	Agency
2,415,734	Saccharification Process	Dworschack, R. G. Burdick, E. M.	USDA
2,451,567	Process for Preparing Starch Hydrolyzing Enzyme with Aspergillus.	Lemense, L. H Van Lanen, J. M.	USDA
2,594,356	Isolation of Alpha-Amylase from Malt Extract.	Schwimmer, S Balls, A. K.	USDA

SUBGROUP 20–84—Wines

The following patent relates to establishments engaged in manufacturing wines, both dry and sweet.

Patent No.	Title of Invention	Inventor	Agency
2,457,560	Pectic Enzyme Preparation Fortified with Pectinesterase.	Jansen, E. F. Lineweaver, H.	USDA

SUBGROUP 20–85—Distilled, rectified, and blended liquors

The following patents relate to establishments engaged in manufacturing alcoholic liquors by distillation and rectification, and in manufacturing cordials and alcoholic cocktails by blending processes, of by mixing liquors and other ingredients. Included are grain alcohol (wine spirits), straight and blended whiskies, brandy, rum, gin, cordials, liqueurs, and prepared alcoholic cocktails. Patents regarding establishments engaged in manufacturing industrial alcohol are classified in Subgroup 28–29.

Patent No.	Title of Invention	Inventor	Agency
2,431,004	Method for Producing Ethyl Alcohol.	Wickerham, L. J.	USDA
2,451,567	Process for Preparing Starch Hydrolyzing Enzyme with Aspergillus.	Lemense, E. H. Van Lanen, J. M.	USDA
2,457,754	Process of Extracting Diastase.	Tucker, I. W. Balls, A. K.	USDA
2,561,333	Reversible Vegetable Gel.	Beckel, A. C. Belter, P. A.	USDA

SUBGROUP 20–91—Baking powder, yeast, and other leavening compounds

The following patents relate to establishments engaged in the manufacture of baking powder, yeast, and other leavening compounds.

Patent No.	Title of Invention	Inventor	Agency
2,318,641	Fermentation Process for the Production of 5-Ketogluconic Acid.	Stubbs, J. J. Lockwood, L. B. Roe, E. T. Ward, G. E.	USDA
2,331,948	Method for the Purification of Lactic Acid.	Ward, G. E. Tabenkin, B.	USDA
2,610,155	Foam Breaker for Submerged Culture Fermentor.	Humfeld, H. Aeschlimann, E. Hoffman, J. R.	USDA
2,617,728	Recovery of Values from Waste Cantaloupe.	Van Atta, G. R.	USDA

SUBGROUP 20–94—Corn sirup, corn sugar, corn oil, and starch

The following patents relate to establishments engaged in manufacturing sirup, sugar, oil, and starch from corn. Potato, rice, wheat, root, and other starches are also included in this subgroup.

Patent No.	Title of Invention	Inventor	Agency
2,354,393	Process for Extracting Prolamines.	Manley, R. H. Evans, C. D.	USDA
2,359,378	Process for the Manufacture of Dextrin from Starch.	Morris, S. G.	USDA
2,368,668	Process for the Production of Wheat Starch.	Langford, C. T. Slotter, R. L.	USDA
2,413,463	Method for Preparing Soluble Allyl Starch.	Vanovsky, E. Nichols, P. L. Meiss, P. E.	USDA
2,414,195	Process for Obtaining Increased Yields in the Extraction of Corn Proteins.	Evans, C. D. Ofelt, C. W.	USDA
2,415,734	Saccharification Process.	Dworschack, R. G. Burdick, E. M.	USDA
2,434,874	Separation of Starch and Protein in Wheat Grain Products and Extraction of Diastase Therefrom.	Tucker, I. W. Balls, A. K.	USDA
2,442,928	Food Products and Method of Making Them.	MacMasters, M.M. Hilbert, G. E.	USDA
2,443,897	Process for the Production of Sweetpotato Starch.	Dexter, G. M. Thurber, F. H.	USDA
2,449,816	Plastic Material from Allyl Starch.	Nichols, P. L. Hamilton, R. M.	USDA
2,450,586	Process for Saccharifying Plant Materials.	Dunning, J. W. Lathrop, E. C.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,451,567	Process for Preparing Starch Hydrolyzing Enzyme with Aspergillus.	Lemense, E. H. Van Lanen, J. M.	USDA
2,455,981	Alkali Process for Wheat Starch Production.	Dimler, R. J.	USDA
2,457,754	Process of Extracting Diastase	Tucker, I. W. Balls, A. K.	USDA
2,472,168	Process for the Preparation of D-Glucosaccharic Acid.	Mehltretter, C. Rist, C. E. Alexander, B. H.	USDA
2,475,261	Starch Recovery Process	Slotter, R. L. Tuomy, J. M.	USDA
2,478,248	Method of Producing Prolamine Filaments.	Croston, C. B. Evans, C. D.	USDA
2,496,261	Preparation of Beta-Amylase from Sweetpotatoes.	Balls, A. K. Walden, M. K. Thompson, R. R.	USDA
2,504,962	Separation of Starch from Wheat Flour.	Burdick, E. M.	USDA
2,510,089	Method of Drying Allyl Starch	Dietz, T. J. Hansen, J. E.	USDA
2,521,704	Fibers from Zein	Evans, C. D. Ofelt, C. W. Smith, A. K.	USDA
2,524,792	Process for Solubilizing Allyl Starch	Hamilton, R. M. Yanovsky, E.	USDA
2,531,383	Stabilization of Viscous Dispersions of Cottonseed Proteins.	Arthur, J. C.	USDA
2,562,200	Process for Making D-Glucuronic Acid and Its Salts.	Mehltretter, C. L.	USDA
2,562,978	Starch Carbamates	Wolff, I. A.	USDA
2,575,352	Phosphates of Amylaceous Polysaccharides.	Lohmar, R. J.	USDA
2,587,650	Method for Defatting Starch	Rist, C. E. Davis, H. A. Wolff, I. A.	USDA
2,597,011	Preparation of Starch Sponge	MacMasters, M. M. Hoaglund, V. E.	USDA
2,610,931	Slurry Adsorption Separation and Fractionation of Sugars.	Montgomery, E. M. Conway, H. F. Weakley, F. B.	USDA

SUBGROUP 20–95—Flavoring extracts and flavoring sirups, not elsewhere classified

The following patents relate to establishments engaged in manufacturing flavoring extracts, sirups, and fruit juices, not elsewhere classified, for soda fountain use or for the manufacture of soft drinks, and colors for bakers' and confectioners' use. Included are flavoring extracts; flavoring concentrates; flavoring powders and pastes; burnt-sugar and other food colors; flavoring sirups; and crushed fruit.

Patent No.	Title of Invention	Inventor	Agency
2,453,109	Method of Preparing Full Flavored Fruit Juice Concentrates.	Atkins, C. D. MacDowell, L. G. Moore, E.	USDA
2,457,315	Volatile Flavor Recovery Process	Milleville, H. P.	USDA
2,479,745	Process for the Production of Apple Essence.	Homiller, R. P. Griffin, E. L.	USDA
2,495,706	Vegetable Gel	DeVoss L. I. Beckel, A. C. Belter, P. A.	USDA
2,572,846	Process for the Preparation of Full Flavored Fruit Concentrate.	Homiller, R. P. Eisenhardt, N. H.	USDA
2,573,699	Process for Making Frozen Concentrated Fruit Juices.	Eskew, R. K. Homiller, R. P. Phillips, G. W.	USDA

SUBGROUP 20–99—Food preparations, not elsewhere classified

The following patents relate to establishments engaged in manufacturing prepared foods and miscellaneous food specialties, not elsewhere classified.

Patent No.	Title of Invention	Inventor	Agency
2,445,299	Dried Egg Powder	Boggs, M. M. Fevold, H. L.	USDA
2,529,477	Process for the Manufacture of Peanut Protein.	Arthur, J. C.	USDA
2,548,895	Extraction of Citrus Peel	Graham, R. P. Shepherd, A. D.	USDA
2,549,877	Process of Producing Maple Sirup Concentrate.	Willits, C. O. Porter, W. L.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,585,015	Process for the Treatment of Egg Whites.	Kaplan, A. M Solowey, M.	USDA
2,605,186	Stabilization of Glyceride Oils with Acetone Dicarboxylic Acid.	Schwab, A. W Moser, H. A. Evans, C. D.	USDA
2,610,918	Preparation of Dried Eggs	Kline, L Sonoda, T. T.	USDA
2,610,973	Stabilization of Glyceride Oils	Evans, C. D Schwab, A. W. Cowan, J. C.	USDA
2,611,705	Production of Potato Chips	Hendel, C. E	USDA
2,618,900	Production of Mushroom Mycelium	Humfeld, H	USDA

MAJOR GROUP 21—TOBACCO PRODUCTS

The patents listed under this title generally relate to establishments engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and snuff, and in stemming and redrying tobacco. The manufacture of insecticides from tobacco byproducts is included in Subgroup 28–97.

SUBGROUP 21–31—Tobacco

The following patents relate to establishments engaged in manufacturing chewing and smoking tabaccos and snuff.

Patent No.	Title of Invention	Inventor	Agency
2,381,328	Process for the Preparation of Myosmine.	Woodward, C. F Eisner, A. Haines, P. G.	USDA
2,392,514	Adjunct for Tobacco	Woodward, C. F Eisner, A. Haines, P. G.	USDA

SUBGROUP 21–41—Tobacco processing, stemming, and redrying

The following patents relate to establishments engaged in the stemming, redrying, and other processing of tobacco.

Patent No.	Title of Invention	Inventor	Agency
2,162,738	Extracting Nicotine from Tobacco	McCoy, C. E	TVA
2,260,677	Process for Determining the Alkaloid Content of Uncured Tobacco.	Markwood, L. N	USDA

MAJOR GROUP 22—TEXTILE MILL PRODUCTS

The patents listed under this title relate generally to establishments engaged in performing any of the following operations, regardless of the type of fiber used; (1) manufacturing yarn, thread, cordage, and twine; (2) manufacturing woven fabric, carpets and rugs, braids, laces, knit fabric, knit garments, and other products from yarn; (3) dyeing and finishing fibers, yarn, and fabric; and (4) coating, waterproofing, and otherwise treating fabric.

SUBGROUP 22–11—Scouring and combing plants

The following patents relate to establishments engaged in processing textile fibers to prepare them for spinning. Included are wool scouring and carbonizing, and producing tops on worsted combs from wool, rayon, or other synthetic fibers.

Patent No.	Title of Invention	Inventor	Agency
2,365,496	Moisture-Measuring Instrument	Shaw, C. S	USDA
2,365,793	Cotton-Working Machine	Asbill, C. M Young, R. C.	USDA
2,378,484	Wool Sampler	Johnston, A LeCompte, G. C.	USDA
2,517,573	Modification of Wool with Beta-Propiolactone.	Jones, H. W Lundgren, H. P.	USDA
2,580,491	Reducing the Crystallinity of Native Fibrous Cellulosic Material.	Ward, K Conrad, C. M. Segal, L.	USDA
2,583,574	Acrolein and Sulfur Halide Process to Strengthen Protein Fibers.	Thorsen, W. J Lundgren, H. P Jones, H. W.	USDA

SUBGROUP 22–21—Yarn mills

The following patents relate to establishments engaged in spinning twisting, winding, or spooling yarn from cotton, wool, spun silk, rayon, or other synthetic stable fibers. Important products of this subgroup include weaving, machine-knitting, hand-knitting, crochet, darning, and embroidery yarns.

Patent No.	Title of Invention	Inventor	Agency
2,344,528	Materials-Conveying Flue	Asbill, C. M	USDA
2,352,707	Cotton Yarn for Water-Pressure Hose	Goldthwait, C. F	USDA
2,365,496	Moisture-Measuring Instrument	Shaw, C. S	USDA
2,365,793	Cotton-Working Machine	Asbill, C. M Young, R. C.	USDA
2,444,064	Method of Treating Tire Cord	Philipp, H. J	USDA
2,449,215	Method of Producing Cotton Cordage.	Goldthwait, C. F Smith, H. O.	USDA
2,474,927	Cord Stretching Apparatus	Young, R. C Brown, J. J.	USDA
2,492,187	Method and Apparatus for Electrical Heating.	Rusca, R. A	USDA

SUBGROUP 22–31—Broad-woven fabric mills (cotton, silk, and synthetic fiber)

The following patents relate to establishments engaged in weaving fabrics over 12 inches in width of cotton, silk, rayon, or other synthetic fibers. Important products of this subgroup include apparel fabrics, household fabrics, and industrial and mechanical fabrics of the above fibers.

Patent No.	Title of Invention	Inventor	Agency
2,379,574	Method of Producing Surgical Bandages with Improved Elastic Properties.	Goldthwait, C. F	USDA
2,404,837	Method of Making Cotton Fabrics with Differential Elastic Properties.	Goldthwait, C. F	USDA
2,450,926	Parachute Made of Self-Supporting Ribbons Which Are Composed of Board and Narrow Bands.	Weinig, F. S	Army
2,454,853	Ribbon Parachute	Weinig, F. S	AF
2,477,526	Thermometric Instrument for Measuring Impregnite in Cloth.	Perley, G. A	Navy
2,494,600	Parachute Composed of Alternating Taut and Loose Ribbons.	Weinig, F. S	AF
2,617,707	Process of Making Soluble Yarns and Threads of Partially Carboxymethylated Cotton.	Daul, G. C Reid, J. D.	USDA

SUBGROUP 22–32—Broad-woven fabric mills (woolen and worsted)

The following patent relates to establishments engaged in weaving woolen and worsted fabrics over 12 inches in width. Important products of this subgroup include woolen and worsted apparel fabrics, household fabrics, and industrial and mechanical fabrics; and woven felt and haircloth.

Patent No.	Title of Invention	Inventor	Agency
2,517,573	Modification of Wool with Beta-Propiolactone.	Jones, H. W. Lundgren, H. P.	USDA

SUBGROUP 22–41—Narrow fabrics and other smallwares mills (cotton, wool, silk, and synthetic fiber)

The following patents relate to establishments engaged in weaving or braiding fabrics 12 inches or narrower in width of cotton, wool, silk, rayon, or other synthetic fibers. Important products of this subgroup include fabric belting (mechanical and apparel), ribbons, tapes, bindings, and gimps; woven labels, hatbands, elastic and nonelastic webbing, covered rubber yarns and threads, and fabric lacings.

Patent No.	Title of Invention	Inventor	Agency
2,450,926	Parachute Made of Self-Supporting Ribbons Which Are Composed of Broad and Narrow Bands.	Weinig, F. S.	Army
2,454,853	Ribbon Parachute	Weinig, F. S.	AF
2,494,600	Parachute Composed of Alternating Taut and Loose Ribbons.	Weinig, F. S.	AF

SUBGROUP 22–51—Full-fashioned hosiery mills

The following patents relate to establishments engaged in knitting, dyeing, or finishing full-fashioned hosiery.

Patent No.	Title of Invention	Inventor	Agency
2,066,311	Machine for Testing Fabrics	Schiefer, H. F. Appel, W. D.	Com
2,268,677	Means for Testing the Resistance of Fabrics to Snagging.	Shearer, H. E. Schenke, E. M.	Com

SUBGROUP 22–61—Dyeing and finishing textiles (except woolen and worsted textiles and knit goods)

The following patents relate to establishments engaged in bleaching, dyeing, printing, finishing, or otherwise converting fabrics, yarn, thread, or raw stock, other than woolen and worsted.

Patent No.	Title of Invention	Inventor	Agency
2,428,843	Flame-Resistant Cellulosic Material and Process for Producing Same.	Georges, L. W. Hamalainen, C.	USDA
2,448,153	Process of making Cotton Textile Water-Absorbent and Rot-Resistant.	Reid, J. D. Daul, G. C.	USDA
2,459,222	Introduction of Amino Groups into Cellulose.	Guthrie, J. D.	USDA
2,462,803	Fireproofing Compositions	Campbell, K. S. Sands, J. E.	USDA
2,493,031	Prevention of Degradation of Textile Fibers by Acids.	Reid, J. D. Ward, W. K.	USDA
2,520,963	Production of Improved Cellulosic Materials.	Reeves, R. E.	USDA
2,576,921	Process for Producing an Ink-Receptive Surface on Tracing Cloth.	Buscher, J. H.	Int
2,592,544	Pentaerythrityl Phosphoric Acid Esters of Cellulose and Processes of Making the Same.	Daul, G. C. Reid, J. D.	USDA
2,596,154	Padder, Mangle, or Squeeze Rolls for Improved Extraction and Impregnation of Textile Fibers, Yarns, and Fabrics.	Keating, J. F. Keating, E. J.	USDA

SUBGROUP 22–91—Felt goods (except woven felts and hats)

The following patents relate to establishments engaged in manufacturing insulating and automotive felts, under-rug mats, and other felt goods, from wool, hair, and jute, by means of heat, moisture, and pressure, or by the needle-loom process. Patents regarding establishments engaged in manufacturing woven felts and haircloth are classified in Subgroup 22–32.

Patent No.	Title of Invention	Inventor	Agency
2,517,573	Modification of Wool with Beta-Propiolactone.	Jones, H. W. Lundgren, H. P.	USDA
2,525,825	Process for Making Casein Fibers for Felting.	Peterson, R. F. Jackson, R. W.	USDA

SUBGROUP 22–94—Processed waste and recovered fibers

The following patent relates to establishments engaged in processing textile-mill waste for spinning and other uses; in recovering cotton, wool, rayon, silk, and other fibers from clippings and rags, and in manufacturing oakum.

Patent No.	Title of Invention	Inventor	Agency
2,521,738	Process for the Production of Artificial Bristles and the Like from Proteins.	McKeekin, T. L. Reid, T. S. Warner, R. C. Jackson, R. W.	USDA

SUBGROUP 22–95—Artificial leather, oilcloth, and other impregnated and coated fabrics

The following patents relate to establishments engaged in manufacturing artificial leather, oilcloth, and other coated and impregnated fabrics, and in the special finishing of textiles.

Patent No.	Title of Invention	Inventor	Agency
2,119,525	Preservative Process for Vegetable Fibers.	Conn, W. T.	Com
2,399,455	Process for Preparing Starch Acetate.	Treadway, R. H.	USDA
2,437,946	Plasticized Prolamine Composition.	Evans, C. D. Manley, R. H.	USDA
2,453,150	Polyesters of Dimethylene D-Gluconic Acid.	Mehltretter, C. L.	USDA
2,461,070	Process to Produce a Stabilized Protein-Formaldehyde Dispersion.	McKinney, L. L.	USDA
2,462,803	Fireproofing Compositions.	Campbell, K. S. Sands, J. E.	USDA
2,477,116	Protective Coating Compositions and Methods for Producing the Same.	Cowan, J. C. Teeter, H. M.	USDA
2,498,694	Preparation of Aqueous Dispersions by Polymerization in the Presence of Ammonium Alginate.	Mast, W. C.	USDA
2,582,239	Water Repellent Treatment of Textiles with Long Chain Substituted Phenol Aldehyde Resin Emulsion.	Dodd, C. G.	Army
2,584,114	Method of Making Partially Carboxymethylated or Phosphorylated Cellulosic Fibrous Materials Crease Resistant and Dye Resistant.	Daul, G. C. Reid, J. D.	USDA

SUBGROUP 22–98—Cordage and twine

The following patents relate to establishments engaged in manufacturing rope, cable, cordage, twine, and related goods, from hemp, jute, cotton, paper, flax, and other fibers.

Patent No.	Title of Invention	Inventor	Agency
2,042,457	Stretch and Compression Testing Device.	Conn, W. T.	Com
2,044,772	Preservative and Marine Growth Arresting Process.	Conn, W. T.	Com
2,044,773	Preservative and Marine Growth Arresting Process.	Conn, W. T.	Com
2,081,146	Trawl Net.	Herrington, W. C.	Com
2,462,803	Fireproofing Compositions.	Campbell, K. S. Sands, J. E.	USDA

MAJOR GROUP 23—APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS

The patents listed under this title generally relate to the cutting-up and needle trades which include establishments producing clothing and related fabricated products by cutting and sewing woven or knit fabrics. All types of textiles are utilized, as well as leather, rubberized fabrics, fur, and other materials.

SUBGROUP 23–85—Raincoats and other waterproof outer garments

The following patent relates to establishments engaged in manufacturing raincoats from rubberized fabrics and other waterproof outer garments made from such material as pliofilm and cellophane.

Patent No.	Title of Invention	Inventor	Agency
2,459,222	Introduction of Amino Groups into Cellulose.	Guthrie, J. D	USDA

SUBGROUP 23–93—Textile bags

The following patent relates to establishments engaged in manufacturing cotton, burlap, and other textile bags.

Patent No.	Title of Invention	Inventor	Agency
2,342,406	Fumigant Bag	Latta, R Yeomans, A. H.	USDA

SUBGROUP 23–94—Canvas products

The following patent relates to establishments engaged in manufacturing awnings, tents, sails, canvas covers, tarpaulins, and canopies.

Patent No.	Title of Invention	Inventor	Agency
2,448,153	Process of Making Cotton Textiles Water-Absorbent and Rot-Resistant.	Reid, J. D Daul, G. C.	USDA

MAJOR GROUP 24—LUMBER AND WOOD PRODUCTS (EXCEPT FURNITURE)

The patents listed under this title generally relate to logging camps engaged in cutting timber and pulpwood; merchant sawmills, veneer mills, lath mills, shingle mills, cooperage-stock mills, planing mills, and plywood mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes. Furniture and office and store fixtures are classified in Major Group 25.

SUBGROUP 24–21—Sawmills and planing mills

The following patents relate to establishments engaged in sawing rough lumber and timber from logs and bolts, or resawing cants, flitches, or lumber into smaller dimensions; and producing surfaced lumber and standard workings or patterns of lumber.

Patent No.	Title of Invention	Inventor	Agency
2,130,783	Plastic Composition	Hohf, J. P Bateman, E. Sherrard, E. C. Beglinger, E.	USDA
2,137,119	Plastic Compositions	Sherrard, E. C Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,151,412	Process for the Utilization of Sawdust for the Production of Plastics.	Sherrard, E. C Beglinger, E. Hohf, J. P. Bateman, E. Mitchell, R. L.	USDA
2,153,316	Method for the Production of Plastics.	Sherrard, E. C Beglinger E. Hohf, J. P. Bateman, E.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,212,866	Plastic Chlorinated Vegetable Fibrous Material.	Sherrard, E. C. Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,296,316	Antishrink Treatment for Wood	Stamm, A. J.	USDA
2,298,017	Process for Plasticizing Lignocellulosic Materials.	Loughborough, W. K.	USDA
2,350,135	Wood Impregnation	Stamm, A. J.	USDA
2,404,471	Floor Construction	Carson, R. H.	Army
2,455,427	Process for Impregnating Wood and Composition therefor.	Loughborough, W. K.	USDA

SUBGROUP 24–22—Veneer mills

The following patents relate to establishments engaged in producing commercial veneer, either face or technical. Veneer which is used in the manufacture of end products such as plywood is classified in Subgroup 24–32.

Patent No.	Title of Invention	Inventor	Agency
2,350,135	Wood Impregnation	Stamm,A. J.	USDA
2,417,995	Acetylation of Lignocellulosic Board Materials.	Stamm, A. J. Tarkow, H.	USDA
2,490,819	Making Laminated Lumber	Lambert, R. D. Smith, D. W.	TVA

SUBGROUP 24–29—Special-product sawmills, not elsewhere classified

The following patents relate to special product sawmills not elsewhere classified.

Patent No.	Title of Invention	Inventor	Agency
2,335,556	Interlocking Decking Panel	Eilson, C. N.	Army
2,552,526	Resilient Chain Post Peeler	Darwin, W. N.	TVA

SUBGROUP 24–32—Plywood plants

The following patents relate to establishnemts engaged in manufacturing commercial plywood, including technical and industrial grades.

Patent No.	Title of Invention	Inventor	Agency
2,298,017	Process for Plasticizing Lignocellulosic Materials.	Loughborough, W, K.	USDA
2,313,953	Process for Resinifying Lignocellulosic Materials.	Loughborough, W. K.	USDA
2,321,258	Process for Making an Improved Plywood.	Stamm, A. J. Seborg, R. M.	USDA
2,354,090	Plywood	Stamm, A. J. Seborg, R. M.	USDA
2,391,489	Method of Molding	Stamm, A. J. Turner, H. D.	USDA
2,490,819	Making Laminated Lumber	Lambert, R. D. Smith, D. W.	TVA
2,494,537	Cold-Setting Resorcinol Glue Composition and Process of Preparation.	Babcock, G. E. Smith, A. K.	USDA

SUBGROUP 24–33—Prefabricated wooden buildings and structural members

The following patents relate to establishments engaged in manufacturing prefabricated wooden buildings, or in producing laminated or fabricated trusses, arches, and other structural members of lumber.

Patent No.	Title of Invention	Inventor	Agency
2,335,556	Interlocking Decking Panel	Wilson, C. N.	Army
2,564,691	Portable Knockdown Building	Heiles, A.	Army

SUBGROUP 24–44—Wooden boxes

The following patents relate to establishments engaged in manufacturing wooden boxes, crates, cases, wooden shipping drums, and carrier trays.

Patent No.	Title of Invention	Inventor	Agency
2,421,486	Package of Cartridge Boxes	Dittmar, F. H.	Army
2,472,939	Crate having Lifting Means	Connolly, C. A.	USDA
2,604,426	Method of Fabricating a Double-Wall Container.	Beekman, E. M.	Army

SUBGROUP 24–91—Wood preserving

The following patents relate to establishments engaged in treating wood with creosote or other preservatives to prevent decay and to protect against fire and insects.

Patent No.	Title of Invention	Inventor	Agency
2,123,899	Wood Preservation	King, D. W	TVA
2,269,891	Insecticide and Fungicide	Bowen, C. V Dearborn, F. E.	USDA
2,296,316	Anti-Shrink Treatment for Wood	Stamm, A. J	USDA
2,455,427	Process for Impregnating Wood and Composition Therefor.	Loughborough, W. K.	USDA
2,500,954	Method Involving the Use of Chemicals for Increasing the Drying Rate of Wood.	Loughborough, W. K. Espenas, L. D.	USDA
2,546,162	Process for Seasoning Wood	Loughborough, W. K. McMillen, J. M. Espenas, L. D.	USDA
2,572,070	Method of Stabilizing Wood	Stamm, A. J Tarkow, H.	USDA
2,572,071	Metal Resinates and Method of Preparation.	St. Clair, W. E Lawrence, R. V.	USDA

MAJOR GROUP 25—FURNITURE AND FIXTURES

The patents listed under this title generally relate to establishments engaged in manufacturing household, office, public-building, professional, and restaurant furniture, office and store fixtures, regardless of the materials used.

SUBGROUP 25–11—Wood household furniture

The following patents relate to establishments engaged in manufacturing wood household furniture commonly used in dwellings. This subgroup includes wooden cases and cabinets for radios and sewing machines, kitchen cabinets, and camp furniture.

Patent No.	Title of Invention	Inventor	Agency
2,461,157	Shelf for Electrical Apparatus	Holden, L. T	Army
2,611,908	Tension Adjustment for Canvas Cots	Siggers, P. E	Army

SUBGROUP 25–22—Metal office furniture

The following patent relates to establishments engaged in manufacturing metal office furniture.

Patent No.	Title of Invention	Inventor	Agency
2,566,186	Rotatably Mounted Drawer	Gillett, G. D	Navy

SUBGROUP 25–32—Professional furniture

The following patent relates to establishments engaged in manufacturing furniture especially designed for laboratory, hospital, and other professional uses.

Patent No.	Title of Invention	Inventor	Agency
2,387,376	Litter	Winer, E Winer, A.	Army

MAJOR GROUP 26—PAPER AND ALLIED PRODUCTS

The patents listed under this title generally relate to the manufacture of pulp primarily from wood, rags and other fibers; the conversion of these pulps into any kind of paper or paperboard; and the manufacture of paper and paperboard into converted paper products such as coated paper, paper bags, paper boxes, cards, and envelopes.

SUBGROUP 26–11—Pulp mills

The following patents relate to establishments engaged in manufacturing pulp from wood or from other materials such as rags, linters, waste paper, and straw.

Patent No.	Title of Invention	Inventor	Agency
2,146,655	Products Obtained from the Hydrogenation of Lignin in the Presence of Suitable Catalysts.	Sherrard, E. C. Harris, E. E.	USDA
2,220,624	Process for the Hydrogenation of Lignin and Waste Pulp Liquors and the Products Thereof.	Sherrard, E. C. Harris, E. E. Saeman, J. F.	USDA
2,328,749	Process for Simultaneously Manufacturing Pulp and Hydrogenated Products from Lignocellulose.	Sherrard, E. C. Harris, E. E.	USDA
2,361,639	Process for Defibering Lignocellulosic Materials.	Loughborough, W. K.	USDA
2,372,437	Filter Medium	Lathrop, E. C. Aronovsky, S. I.	USDA

SUBGROUP 26–12—Paper and paperboard mills

The following patents relate to establishments engaged in manufacturing converted paper products, paper and paperboard from wood pulp and other fibers.

Patent No.	Title of Invention	Inventor	Agency
2,449,812	Water Soluble Coating Composition for Paper.	Hervey, L. R. Whitaker, A. C.	Army
2,450,992	Free-Fall Aerial Container	Sanderson, W. J.	USDA
2,603,156	Shock-Resistant Product	Lathrop, E. C. Naffziger, T. R.	USDA

SUBGROUP 26–13—Building-paper and building-board mills

The following patent relates to establishments engaged in manufacturing building paper and building board from wood pulp and other fibrous materials.

Patent No.	Title of Invention	Inventor	Agency
2,587,591	Cotton Filled Structional Material and Process of Preparing the Same.	Busby, H. S. Ward, W. L.	USDA

SUBGROUP 26–41—Paper coating and glazing

The following patents relate to establishments engaged in manufacturing coated and glazed paper. Important products include coated-book, waxed, and gummed paper (including gummed labels, and paper and cloth tape), waterproofed wrapping paper, flypaper, and cloth-lined paper.

Patent No.	Title of Invention	Inventor	Agency
2,256,507	Apparatus for Conditioning Paper	Weber, C. G. Geib, M. N.	Com
2,370,266	Protein Product and Process for Making Same.	Smith, A. K. Max, H. J. Wheeler, D. H.	USDA
2,399,455	Process for Preparing Starch Acetate	Treadway, R. H.	USDA
2,449,812	Water Soluble Coating Composition for Paper.	Hervey, L. R. Whitaker, A. C.	Army
2,461,070	Process to Produce a Stabilized Protein-Formaldehyde Dispersion.	McKinney, L. L.	USDA
2,463,740	Preparation of Peanut Protein Free from Peanut Skin Pigment.	Burnett, R. S.	USDA

SUBGROUP 26–61—Paper bags

The following patents relate to establishments engaged in manufacturing paper bags. Important products include kraft paper bags for groceries, shipping or heavy-duty paper bags or sacks for cement,

flour, coal, etc., and glassine bags, cellophane bags, and miscellaneous merchandise bags.

Patent No.	Title of Invention	Inventor	Agency
2,333,638	Process of Packaging Dehydrated Molasses.	Chalkley, L.	Com
2,342,406	Fumigant Bag	Latta, R. Yeomans, A. H.	USDA
2,493,031	Prevention of Degradation of Textile Fibers by Acids.	Reid, J. D. Ward, W. K.	USDA

SUBGROUP 26–71—Paperboard boxes; folded, set-up, and corrugated

The following patents relate to establishments engaged in manufacturing paperboard containers or boxes. Important products of this subgroup include folding paper boxes; set-up boxes; corrugated and solid fiberboard boxes; decorated, lithographed, lacquered, and fancy covered paperboard boxes; cigarette and confectionery boxes.

Patent No.	Title of Invention	Inventor	Agency
2,345,350	Carton	Markwardt, L. J. Carlson, T. A.	USDA
2,580,391	Fiberboard Construction	Babcock, G. E. Johnson, V. L. Smith, A. K.	USDA

SUBGROUP 26–74—Fiber cans, tubes, drums, and similar products

The following patents relate to establishments engaged in manufacturing fiber cans, cones, cores, mailing cases, tubes, drums, and similar products.

Patent No.	Title of Invention	Inventor	Agency
2,439,903	Thread Advancing, Storage, and Stretching Reel.	O'Connell, R. A.	USDA
2,478,178	Packaging and Supporting Sleeve	Sanderson, W. J. Westover, B. J.	USDA
2,518,450	Cushioned Package of Fragile Articles.	Cowen, S. T. Shriro, M. A.	Army

SUBGROUP 26–94—Pulp goods, pressed and molded

The following patents relate to establishments engaged in manufacturing all kinds of pressed and molded pulp goods, such as pulp plates and utensils, and papier-mache articles other than statuary and art goods.

Patent No.	Title of Invention	Inventor	Agency
2,137,119	Plastic Compositions	Sherrard, E. C. Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,151,412	Process for the Utilization of Sawdust for the Production of Plastics.	Sherrard, E. C. Beglinger E. Hohf, J. P. Bateman, E. Mitchell, R. L.	USDA
2,153,316	Method for the Production of Plastics	Sherrard, E. C. Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,212,866	Plastic Chlorinated Vegetable Fibrous Material.	Sherrard, E. C. Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,361,639	Process for Defibering Lignocellulosic Materials.	Loughborough, W. K.	USDA

(NOTE.—Since there are no applicable patents, Major Group 27, Printing, Publishing and Allied Industries, is omitted.)

MAJOR GROUP 28—CHEMICALS AND ALLIED PRODUCTS

The patents listed under this title relate generally to establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Patents classified in this major group relate to three general classes of products: (1) Basic chemicals such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastic materials, crude animal and vegetable oils, dry colors, and pigments; and (3) finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, and explosives. Nonferrous metals and high percentage ferro-alloys are classified in Major Group 33 and starches in Subgroup 20–94.

SUBGROUP 28–11—Sulfuric acid

The following patents relate to establishments engaged in manufacturing sulfuric acid by the contact or chamber process.

Patent No.	Title of Invention	Inventor	Agency
2,188,324	Making Sulfuric Acid	Walthall, J. H	TVA
2,260,677	Process for Determining the Alkaloid Content of Uncured Tobacco.	Markwood, L. N	USDA
2,269,315	Process for the Removal of Metallic Elements from Water.	Nelson, G. H Levine, M. Lynch, D.	USDA
2,342,704	Making Sulphuric Acid	Striplin, M. M	TVA
2,429,264	Drying Rosin Oil and Method of Producing Same.	Fleck, E. E	USDA
2,465,888	Butadiene Emulsion Polymerization in the Presence of Levo-Pimaric Acid-Maleic Anhydride Addition Product Esters.	Lawrence, R. V	USDA
2,465,901	Butadiene Emulsion Polymerization in the Presence of Levo-Pimaric Acid-Maleic Anhydride Addition Product.	Lawrence, R. V McKennon, F. L.	USDA

SUBGROUP 28–12—Alkalies and chlorine

The following patents relate to establishments engaged in manufacturing sodium hydroxide (caustic soda), potassium hydroxide (caustic potash), potassium and sodium carbonates, sodium bicarbonate, sal soda, soda ash, and chlorine. Ammonium compounds are classified in Subgroup 28–19.

Patent No.	Title of Invention	Inventor	Agency
2,240,668	Process for the Production of Chlorine.	Reed, D. L	USDA
2,269,315	Process for the Removal of Metallic Elements from Water.	Nelson, G. H Levine, M. Lynch, D.	USDA
2,309,919	Process for the Production of Chlorine.	Reed, D. L	USDA
2,379,574	Method of Producing Surgical Bandages with Improved Elastic Properties.	Goldthwait, C. F	USDA
2,399,156	Treatment of Rubber	Hanslick, R. S Stamberger, P. Eskew, R. K.	USDA
2,403,481	Method of Concentrating Iron Ores	Clemmer, J. B Rampacek, C.	Int
2,404,837	Method of Making Cotton Fabrics with Differential Elastic Properties.	Goldthwait, C. F	USDA
2,422,907	Purification of Acid Potassium Fluorides.	Johnson, P. R	AEC
2,455,981	Alkali Process for Wheat Starch Production.	Dimler, R. J	USDA
2,461,661	Preparation of Alkali Metal Compounds.	Schlesinger, H. I Brown, H. C.	AEC
2,461,662	Preparation of Alkali Metal Compounds.	Schlesinger, H. I Brown, H. C.	AEC
2,461,663	Preparation of Alkali Metal Borohydrides.	Schlesinger, H. I Brown, H. C.	AEC
2,463,740	Preparation of Peanut Protein Free from Peanut Skin Pigment.	Burnett, R. S	USDA

Patent No.	Title of Invention	Inventor	Agency
2,478,170	Low-Methoxyl Pectins & Process for their Preparation.	Maclay, W. D. McCready, R. M.	USDA
2,494,968	Alkoxy Borohydrides and their Method of Preparation.	Schlesinger, H. I. Brown, H. C.	AEC
2,496,115	Stabilization of Perfluoro Oils	Burford, W. Weber, C. E.	AEC
2,499,836	Preparation of Higher Chlorides of Uranium.	Reiber, H. G.	AEC
2,500,954	Method Involving the Use of Chemicals for Increasing the Drying Rate of Wood.	Loughborough, W. K. Espenas, L. D.	USDA
2,502,477	Acid Leaching of Pectinous Materials.	Owens, H. S.	USDA
2,503,258	Neutralization of Pectinic Acids With Sodium Bicarbonate.	Graham, R. P. Shepherd, A. D.	USDA
2,508,234	Distillation Apparatus	Duffey, D.	AEC
2,508,989	Apparatus for Purifying Gases	Brandegee, M. M.	AEC
2,537,034	Purification of Commercial Soda Ash.	Churchward, R. E.	Int
2,540,248	Manufacture of Flourine by Electrolysis.	Downing, R. C.	AEC
2,550,708	Removal of Silica from Alkaline Carbonate Brines.	Meyer, E. G.	Int
2,589,391	Boron Chloride Production from an Alloy of Boron with Tantalum.	Hutchison, C. A. Smith, J. S.	AEC
2,590,426	Process for Photochemical Chlorination of Hydrocarbons.	Loverde, A.	AEC

SUBGROUP 28–19—Industrial inorganic chemicals, not elsewhere classified.

The following patents relate to establishments engaged in manufacturing industrial inorganic chemicals, not elsewhere classified. Important products of this subgroup include inorganic acids such as boric, hydrochloric, hydrofluoric ,nitric, and phosphoric; inorganic salts of sodium, potassium, aluminum, calcium, chromium, magnesium, mercury, nickel, silver and tin; inorganic compounds such as alums, calcium carbide, sodium silicate, ammonium compounds, and anhydrous ammonia; fertilizer materials such as muriate and sulfate of potash; and elemental bromide and iodine. Sulfuric acid is classified in Subgroup 28–11, alkalies and chlorine in Subgroup 28–12, inorganic paint pigments in Subgroup 28–52, and medicinal grades of inorganic chemicals in Subgroup 28–33.

Patent No.	Title of Invention	Inventor	Agency
2,026,519	Apparatus for Making Phosphoric Acid.	Curtis, H. A.	TVA
2,029,309	Preparing Phosphate Charging Stock.	Curtis, H. A. Abrams, A. J.	TVA
2,033,149	Process for the Recovery of Potassium Salts from Minerals.	Partridge, E. P. Fragen, N.	Com
2,033,159	Method of Recovering Potassium Sulphate from Syngenite.	Storch, H. H. Fragen, N.	Com
2,037,706	Manufacturing of Ammoniated Superphosphates.	Curtis, H. A.	TVA
2,039,297	Separating Phosphorus	Curtis, H. A.	TVA
2,040,081	Agglomerating Fine Phosphate Rock.	Curtis, H. A.	TVA
2,043,238	Manufacturing of Di-Calcium Phosphate.	Curtis, H. A.	TVA
2,044,774	Treating Phosphate Rock to Eliminate Fluorine.	Curtis, H. A.	TVA
2,044,793	Process for Crystallizing Calcium Salts of Aldonic Acids and Resulting Products.	Isbell, H. S.	Com
2,051,029	Manufacturing of Ammonium Phosphates.	Curtis, H. A.	TVA
2,053,266	Manufacturing of Calcium Phosphates.	Curtis, H. A.	TVA
2,067,538	Process for Making Double or Treble (Calcium) Superphosphate.	MacIntire, W. H.	TVA
2,069,226	Making Phosphate Fertilizer and Nitric Acid.	Curtis, H. A.	TVA
2,070,581	Guanidine Phosphate Fertilizer	Curtis, H. A.	TVA
2,070,582	Making Superphosphate	Curtis, H. A.	TVA
2,072,980	Manufacturing of Granular Calcium Phosphates.	Curtis, H. A.	TVA
2,072,981	Producing Phosphorus	Curtis, H. A.	TVA
2,075,801	Method of Nitrifying Superphosphate.	Curtis, H. A.	TVA

Patent No.	Title of Invention	Inventor	Agency
2,086,565	Making Calcium Phosphate Fertilizer.	MacIntire, W. H.	TVA
2,093,460	Making Manganese Phosphate Fertilizer.	MacIntire, W. H.	TVA
2,093,461	Making Manganese Phosphate	MacIntire, W. H.	TVA
2,095,993	Manganese Phosphate Fertilizer	MacIntire, W. H.	TVA
2,095,994	Making Tri-Calcium Phosphate	MacIntire, W. H.	TVA
2,107,857	Process of Oxidizing Phosphorus	Emmett, P. H.	USDA
2,108,940	Process for Making Di-Calcium Phosphate.	MacIntire, W. H.	TVA
2,110,870	Oxidizing Elemental Phosphorus	Curtis, H. A.	TVA
2,113,574	Calcium Metaphosphate	Curtis, H. A.	TVA
2,114,280	Making Guanidine Salts	Aldred, J. W.	TVA
2,117,301	Apparatus for Producing Phosphorus.	Curtis, H. A. Copson, R. L.	TVA
2,118,829	Preparation of Cobalt-Copper Catalysts.	Storch, H. H.	Int
2,125,297	Oxidizing Elemental Phosphorus	Junkins, J. N.	TVA
2,126,793	Removing Fluorides From Water	MacIntire, W. H.	TVA
2,135,486	Separating Elemental Phosphorus from Impurities.	Almond, L. H.	TVA
2,137,674	Process for Making Double or Treble Calcium and Magnesium Superphosphate.	MacIntire, W. H.	TVA
2,143,001	Producing Phosphorus	Curtis, H. A. Copson, R. L.	TVA
2,143,025	Making Monocalcium Phosphate	Newton, R. H.	TVA
2,143,438	Process for the Production of Monocalcium Chlorophosphate.	Fox, E. J.	USDA
2,143,865	Treating Phosphate Rock to Eliminate Fluorine.	Copson, R. L.	TVA
2,152,662	Method of Preparing Ribose	Phelps, F. P.	Com
2,173,825	Apparatus for Making Calcium Metaphosphate.	Curtis, H. A. Heaton, R. C.	TVA
2,173,826	Making Calcium Metaphosphate Fertilizer.	Curtis, H. A.	TVA
2,184,287	Making Calcium Metaphosphate	Curtis, H. A.	TVA
2,185,224	Purification of Rock Minerals	Ralston, O. C.	Int
2,186,975	Crystalline Calcium Lactobionate Calcium Bromide and Process for Making the Same.	Isbell, H. S.	Com
2,214,214	Treating Alum	Walthall, J. H.	TVA
2,220,624	Process for the Hydrogenation of Lignin and Waste Pulp Liquors and the Products Thereof.	Sherrard, E. C. Harris, E. E. Saeman, J. F.	USDA
2,221,770	Oxidation of Crude Phosphorous	Almond, L. H.	TVA
2,224,888	Making Aluminum Sulfate	Walthall, J. H.	TVA
2,231,024	Calcium Oxide-Chromium Oxide Refractory.	Pole, G. R.	TVA
2,231,944	Calcium Oxide-Chromium Oxide-Zirconium Oxide Refractory.	Pole, G. R.	TVA
2,231,945	Calcium Oxide-Zirconium Oxide Refractory.	Pole, G. R.	TVA
2,233,401	Making Calcium Metaphosphate	Copson, R. L.	TVA
2,247,373	Making Phosphoric Acid	Hartford, C. E. Striplin, M. M.	TVA
2,263,594	Making Cupric Meta-Arsenite	Rushton, E. R.	TVA
2,269,892	Insecticide and Fungicide	Carter, R. H.	USDA
2,273,461	Process for the Production of Calcium Metaphosphate and Hydrogen.	Brunauer, S. Shultz, J. F.	USDA
2,280,848	Making Alkali Metal Phosphates	Pole, G. R.	TVA
2,288,610	Treatment of Ores	Dean, R. S.	Int
2,289,365	Iron-Phosphorous-Silicon Alloy	Jerabek, H. S.	TVA
2,289,383	Calcium Oxide-Chromium Oxide-Aluminum Oxide Refractory.	Pole, G. R.	TVA
2,297,538	Liquid Oxygen Explosive	Denues, A. R.	Int
2,297,689	Separation of Feldspar from Quartz	O'Meara, R. G.	Int
2,303,318	Separating Hydrated Phosphorous Pentoxide.	Baskervill, W. H.	TVA
2,317,413	Process for the Concentration of Boron Chemically Combined from its Ores by Autoflotation.	Keith, S. F.	Int

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Patent No.	Title of Invention	Inventor	Agency
2,320,432	Treating Ferrophosphorous	Bridger, G. L.	TVA
2,338,114	Process for the Preparation of Polyhydroxydibasic Acids and their Salts.	Isbell, H. S.	Com
2,338,115	Process of Oxidizing Uronic Acids	Isbell, H. S.	Com
2,349,836	Process for the Curing and Preservation of Animal and Fish Products.	Stuart, L. S.	USDA
2,353,658	Process for the Production of Dicalcium Phosphate and Ammonium Chloride.	Fox, E. J.	USDA
2,355,080	Burner	Junkins, J. N.	TVA
2,359,340	Process of Purifying Aluminum Sulphate Solution.	Walthall, J. H.	TVA
2,359,378	Process for the Manufacture of Dextrin from Starch.	Morris, S. G.	USDA
2,363,029	Treatment of Magnesite Ores	Weinig, A. J.	Navy
2,363,030	Flotation of Magnesite	Weinig, A. J.	Navy
2,363,031	Froth Flotation Treatment of Low Grade Magnesite Ores.	Weinig, A. J.	Navy
2,363,104	Magnesite Ore Treatment	Weinig, A. J.	Navy
2,365,702	Extracting Alumina	Hignett, T. P.	TVA
2,366,184	Production of Potable Water from Saline Solutions.	Dean, R. S.	INT
2,374,188	Oxidizing Phosphorous	Frear, G. L.	TVA
2,374,674	Method For Thermal Decomposition of Metallic Nitrates.	Fox, A. L. Chindgren, C. J.	Int
2,379,929	Separating Protein from Waste Material.	Rushton, E. R.	TVA
2,380,406	Production of Low Sulphur Sponge Iron.	Buehl, R. C.	Int
2,381,477	Production of Alumina	Walthall, J. H.	TVA
2,383,467	Flotation of Iron Ores	Clemmer, J. B. Clemmons, B. H.	Int
2,385,819	Beneficiation of Beryllium Ores	Lamb, F. D. Banning, L.	Int
2,390,988	Process of Deleading Gasoline	Calingaert, G. Soroos, H. Shapiro, H.	Army
2,390,996	Process for the Coagulation of Castilloa Latex.	Ford, T. F.	USDA
2,392,846	Method for the Removal of Tetraethyl Lead from Hydrocarbons.	Friedman, M.	Army
2,393,008	Ore Concentration	Woodward, H. S. Bates, W. R.	Navy
2,396,474	Desiccator Unit	Riley, J. F.	Navy
2,397,951	Making Red Phosphorus	De Witt, T. W.	TVA
2,401,331	Acid Rhodium Plating	Brenner, A. Olson, W. A.	Com
2,407,651	Concentrating Fluorspar by Froth Flotation.	Clemmer, J. B. Clemmons, B. H.	Int
2,410,043	Process for Manufacturing Calcium Fluoride.	Breton, E. J. Waggaman, W. H.	Int
2,412,217	Froth Flotation of Chromite with Fluoride.	Havens, R.	Int
2,413,709	Method of Recovering Alumina and Hydrochloric Acid.	Hoffman, J. D.	Com
2,414,118	Synthesis of Fluorine and its Derivatives.	Orchin, M.	Int
2,414,815	Beneficiation of Beryllium Ores	Kennedy, J. S. O'Meara, R. G.	Int
2,415,416	Froth Flotation of Silica from Iron Ore with Anionic Collector.	Clemmer, J. B. Williams, M. F.	Int
2,417,869	Application of Cellulose Ethers to Textiles.	Barnes, L. B. Goldthwait, C. F. Smith, H. O.	USDA
2,419,255	Process of Making Carbon Monoxide Oxidation Catalyst.	Dely, J. G.	TVA
2,420,788	Compounding of Rubber	McKennon, F. L. Linquist, J. R.	USDA
2,421,380	Method of Treating Sugar	Isbell, H. S.	Com
2,422,590	Production of Fluorine	Schumb, W. C. Stevens, A. J.	AEC
2,422,907	Purification of Acid Potassium Fluorides.	Johnson, P. R.	AEC
2,424,552	Froth Flotation of Nonmetallic Minerals.	Clemmer, J. B. Rampacek, C.	Int

Patent No.	Title of Invention	Inventor	Agency
2,424,975	Process for Separating Potassium Sulfate from Alkali Carbonates.	Ervin, G.	Int
2,434,715	Glutamic Acid-Free Protein Hydrolysate and the Production Thereof.	Olcott, H. S. Lewis, J. C.	USDA
2,436,509	Method for Obtaining Granular Alumina.	Faust, C. L.	Navy
2,436,659	Process of Making d-Saccharic Acid.	Mehltretter, C. L.	USDA
2,436,778	Process for Preparing Alumina	Pray, H. A. Faust, C. L. Jelen, F. C.	Navy
2,440,999	Compressed Neutron Source	Anderson, H. L.	AEC
2,442,589	Purification of Perfluoroheptane by Azeotropic Distillation with Methyl Ethyl Ketone.	Hass, H. B. Evans, L. R.	AEC
2,443,280	Hydroxylation Process	Swern, D. Scanlan, J. T.	USDA
2,445,306	Electrolyte for Primary Cells Comprising Lithium Bromide.	Lawson, H. E.	Navy
2,446,780	Method of Preparing Uranium Hydride.	Newton, A. S.	AEC
2,446,997	Molecular Distillation Process and Apparatus for the Separation of Isotopes, etc.	Brewer, A. K. Madorsky, S. L.	AEC
2,447,483	Additives for Silicone Oils	Baker, H. R. Zisman, W. A.	Navy
2,448,479	Uranium Monocarbide and Method of Preparation.	Wilhelm, H. A. Daane, A. H.	AEC
2,448,506	Production of Itaconic Acid	Ambler, J. A. Curl, A. L.	USDA
2,448,831	Production of Itaconic Acid	Roberts, E. J. Ambler, J. A. Curl, A. L.	USDA
2,449,071	A Catalyst for the Synthesis of Hydrocarbons.	Hofer, L. J. Stern, N. R. Hawk, C. O.	Int
2,449,152	Separation of Monoethal Amine from Admixtures by Azeotropic Distillation with Chlorobenzene.	Speck, J. C.	Navy
2,452,041	Making Calcium Aluminate Sinter	Elmore, K. L.	TVA
2,452,139	Method of Preparing Uranium Deuteride.	Newton, A. S.	AEC
2,452,913	Method of Producing Calcium Hydrides by Distillation.	Duffey, D.	AEC
2,453,138	Process of Deleading Gasoline	Kharasch, M. S.	Army
2,457,754	Process of Extracting Diastase	Tucker, I. W. Balls, A. K.	USDA
2,458,171	Isolation of Acetylesterase from Citrus Waste.	MacDonnell, L. R. Jansen, E. F. Jang, R.	USDA
2,461,661	Preparation of Alkali Metal Compounds.	Schlesinger, H. I. Brown, H. C.	AEC
2,461,662	Preparation of Alkali Metal Compounds.	Schlesinger, H. I. Brown, H. C.	AEC
2,461,663	Preparation of Alkali Metal Borohydrides.	Schlesinger, H. I. Brown, H. C.	AEC
2,462,981	Method for the Production of Itaconic Acid.	Lockwood, L. B. Moyer, A. J.	USDA
2,464,267	Dehydrating Alumina in the Production of Aluminum.	Short, A. M.	Int
2,466,118	Precipitation of Ammonium Diuranate.	Armstrong, G. M. Miller, A. J.	AEC
2,467,123	Process for the Removal of Hydrogen Halide from Halogenated Compounds.	Fleck, E. E. Haller, H. L.	USDA
2,468,681	Purification of Hydrogen Fluoride	McBride, R. H.	AEC
2,469,413	Process for Preparing Barium Aluminate.	Roller, P. S.	Int
2,469,418	Producing Silicon	Striplin, M. M.	TVA
2,469,916	Process of Producing Uranium Tetrabromide.	Carter, J. M.	AEC
2,475,261	Starch Recovery Process	Slotter, R. L. Tuomy, J. M.	USDA
2,476,335	Purification of Red Phosphorus	Tusson, J. R.	TVA
2,476,979	Process for Preparing Alumina from Clays and Other Silicates of Aluminum.	Hoeman, E. C.	Int
2,476,999	Solvation and Depolymerization of Coal.	Orchin, M.	Int
2,477,924	Method of Preparing Uranium Trioxide.	Fried, S. Davidson, N. R.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,482,127	Apparatus for Refining Metals	Schlechten, A. W. Kroll, W. J. Yerkes, L. A.	Int
2,483,991	Radiation Exposure Meter	Wollan, E. O. Pardue, L. A. Goldstein, N.	AEC
2,485,903	VII Type Phosphor	Miller, N. F.	Navy
2,486,955	Producing Thin Film of Metal Oxide	Langwill, K. E.	AEC
2,487,360	Nitrogen Purification Process	Newton, A. S.	AEC
2,488,568	Production of Aluminum-Silicon Alloys.	Striplin, M. M. Kelly, W. M.	TVA
2,489,393	Crystal and Method of Fabricating Same.	Argabrite, G. A. Burke, T. F.	Navy
2,494,968	Alkoxy Borohydrides and their Method of Preparation.	Schlesinger, H. I. Brown, H. C.	AEC
2,495,497	Method of Liquid Stabilization of Nickel Catalysts.	Ahlberg, J. E. Hiskey, C. F.	AEC
2,496,115	Stabilization of Perfluoro Oils	Burford, W. Weber, C. E.	AEC
2,497,863	Method of Concentrating Fluorspar Ores.	Clemmer, J. B. Clemmons, B. H.	Int
2,499,833	Method of Making Fluorinated Organic Compounds.	Perkins, M. A.	AEC
2,499,836	Preparation of Higher Chlorides of Uranium.	Reiber, H. G.	AEC
2,500,930	Process for Refining Rutin	Couch, J. F. Krewson, C. F. Porter, W. L.	USDA
2,502,472	Electrolytic Preparation of Calcium D-Arabonate.	Mehltretter, C. L. Dvonch, W.	USDA
2,502,477	Acid Leaching of Pectinous Materials.	Owens, H. S.	USDA
2,502,490	Reaction and Stratifying Container	Sweet, A. T.	Int
2,503,258	Neutralization of Pectinic Acids with Sodium Bicarbonate.	Graham, R. P. Shepherd, A. D.	USDA
2,504,134	Deleading of Gasoline	Kharasch, M. S.	Army
2,504,154	Process for Removing Impurities from Mother Liquors.	Roller, P. S.	Int
2,505,818	Solubilizing Tanning Bark Extract with Waste Sulfite Liquors.	Williams, K. T. Potter, E. F.	USDA
2,506,945	Treatment of Pitchblende Ores	Thomas, H. C. Tomcufcik, A. S.	AEC
2,508,234	Distillation Apparatus	Duffey, D.	AEC
2,508,989	Apparatus for Purifying Gases	Brandegee, M. M.	AEC
2,509,228	Electric Furnace for Phosphate Reduction.	Hardin, S. A.	TVA
2,510,850	Mehtod of Producing Uranium Fluorides and a Compound Produced Thereby.	Agron, P. A. Weller, S. W.	AEC
2,511,667	Chemical Method for Concentrating Isotopes of Carbon.	Calvin, M. Yankwich, P. E.	AEC
2,513,351	Preparation of Gluten Phosphates	Olcott, H. S. Mohammad, A.	USDA
2,514,115	Method of Dissolving Difficultly Soluble Metal Sulfates.	Angerman, A. H.	AEC
2,515,112	Method for Disposing of Corrosive Gases.	Burford, W. B. Anderson, H. C.	AEC
2,517,580	Mildew Resistant Paint	Lewis, A. J.	USDA
2,519,361	Production of Magnesium Carbonate or Magnesium Oxide Containing Little or No Calcium.	Evans, R. L.	Int
2,519,362	Method of Reducing the Concentration of Silicain Sodium Aluminate Solutions.	Flint, E. P. Shartsis, L. Wells, L. S.	Com
2,519,792	Electrolytic Production of Metallic Uranium.	Rosen, R.	AEC
2,520,958	Nickel Recovery	Poole, H. G. Ravitz, S. F. Dean, K. C.	Int
2,521,112	Method and Apparatus for Separating Fluids by Thermal Diffusion.	Beams, J. W.	AEC
2,521,124	Infrared Strontium Sulfide Phosphors.	Miller, N. F.	Navy
2,521,626	Process for Fluorinating Hydrocarbons.	Benning, A. F.	AEC
2,521,937	Method of Purifying Inert Gases	Newton, A. S.	AEC
2,522,500	Production of Phosphatic Fertilizers	Bridger, G. L.	TVA

Patent No.	Title of Invention	Inventor	Agency
2,522,504	Gluten Phosphates and Method for Preparing Them.	Ferrel, R. E. Olcott, H. S.	USDA
2,522,534	Isolation of Pectinic Acids	Owens, H. S. Lotzkar, H.	USDA
2,522,537	Dithionate Process for Production of Zinc Hydroxide from Zinc Oxidized Ores.	Ravitz, S. F. Back, A. E.	Int
2,523,892	Extraction Process for Cerium	Warf, J. C.	AEC
2,524,384	Production of Uranium Triiodide	Holmes, J. A.	AEC
2,526,707	Process for the Production of a Cobalt Salt from Arseniferous Ores.	Stahl, J. C. Shelton, F. K.	Int
2,526,805	Method of Forming Uranium Carbon Alloys.	Carter, J. H. Daane, A. H.	AEC
2,527,320	Dehydration of Alkali-Metal Acid Fluorides.	McHarness, R. C. Benning, A. F.	AEC
2,528,454	Coating Process	Schlesinger, H. I. Schaeffer, G. W.	AEC
2,531,143	Method of Purifying Beryllium Oxide.	Malm, J. G. Hutchison, C. A.	AEC
2,531,431	Method of Preparing Calcium Firmed Frozen Apple Slices.	Hills, C. H.	USDA
2,532,322	Phosphorous Combustion Furnace	McFarlin, C. J.	TVA
2,532,490	Process for Recovery of C^{14} Activities	Fries, B. A.	AEC
2,532,707	Method of Preparation of Neptunium Trifluoride.	Fried, S. Davidson, N. R.	AEC
2,533,138	Purification of Hydrogen	Newton, A. S.	AEC
2,534,259	Recovery of Alcohol from a Ternary Solution.	Gee, E. A. Bossche, J. V.	Int
2,534,676	Preparation of Compounds of Uranium and Nonmetals.	Newton, A. S. Johnson, O.	AEC
2,534,677	Production of Uranium Halides	Newton, A. S. Johnson, O.	AEC
2,535,042	Preparation of Iron Carbides	Cohn, E. M. Hofer, L.	Int
2,535,572	Preparation of UF_6	Hainer, R. M.	AEC
2,536,616	Preparation of Uranium Hydride	Warf, J. C.	AEC
2,537,078	Purification of Red Phosphorus	Miller, P.	TVA
2,537,950	Preparation of Substituted Diaminostilbenes from Pinacols.	Allen, M. J.	HEW
2,539,282	Rare Earth Separation by Adsorption and Desorption.	Spedding, F. H. Voigt, A. F.	AEC
2,539,428	3,3′-Dithiolisobutyric Acid	Jansen, E. F.	USDA
2,540,248	Manufacture of Fluorine by Electrolysis.	Downing, R. C.	AEC
2,540,960	Electrolytic Cells	Osborne, S. G.	AEC
2,541,190	Fluorination of Lubricating Oil	Benning, A. F.	AEC
2,544,277	Preparation of Uranium Nitride	Newton, A. S. Johnson, O.	AEC
2,545,606	Method of Coating with Plutonium Acetylacetonate and Coated Product.	Dixon, J. S. Cunningham, B. B. Smith, C.	AEC
2,545,612	Sulfur-Containing Compounds of Neptunium and a Process for their Preparation.	Fried, S. Davidson, N. R.	AEC
2,545,633	Preparation of Lithium Compounds	Schlesinger, H. I. Brown, H. C.	AEC
2,545,920	Transuranic Metal Halides and a Process for the Production Thereof.	Fried, S.	AEC
2,546,933	Method of Dissolving Thorium Values.	Schuler, F. W. Steahly, F. L. Stoughton, R. W.	AEC
2,546,953	Zirconium-Hafnium Separation Process.	Street, K.	AEC
2,549-565	Method of Fluorinating Organic Compounds with Molten Silver Fluorides.	Benner, R. G.	AEC
2,549,609	Separation of Fluorinated Hydrocarbons by Distillation with Hydrogen Fluoride.	Johnson, K. C.	AEC
2,549,798	Production of Magnesium Chloride from Magnesium Silicate Ore.	Gee, E. A. Pawel, M. T.	Int
2,549,899	Process for the Preparation of Neptunium Tetrafluoride.	Fried, S. Davidson, N. R.	AEC
2,549,988	Manufacture of Organic Fluoride Compounds.	Perkins, M. A.	AEC
2,550,708	Removal of Silica from Alkaline Carbonate Brines.	Meyer, E. G.	Int

Patent No.	Title of Invention	Inventor	Agency
2,551,543	Production of Uranium Peroxide	Mohr, P.	AEC
2,553,217	Cyclic Organic Fluorine Compounds and Method of Making.	Stilmar, F. B.	AEC
2,553,595	Process of Regenerating the Hydroxyapatites of Tricalcium Phosphate and Trimagnesium Phosphate for Use as Fluoride Absorbent Reagents.	Maier, F. J.	HEW
2,554,649	Separation of Radium from Barium	Tomkins, E. R.	AEC
2,558,377	Preparation of Compacts of High-Density Uranium Hydride.	Perlman, M. L. Weissman, S. I.	AEC
2,559,684	Stabilizing Red Phosphorus	Skolnik, S. Bridger, G. L.	TVA
2,562,122	Preparation of Uranium Bromide	Powell, J. E.	AEC
2,562,159	Production of Xylene Hexafluoride	Wojcik, B. H. Maude, A. H.	AEC
2,563,587	Method for Mitigating Radioactive Contamination.	De Ment, J.	AEC
2,563,718	Shielded Container	Gifford, J. F.	AEC
2,564,024	Method of Making Halocarbon Polymers.	Miller, W. T.	AEC
2,564,241	Extraction Process for Cerium	Warf, J. C.	AEC
2,565,771	Stabilization of Cyanogen Chloride	Kharasch, M. S.	Army
2,566,052	Process for Photochemical Chlorination of Hydrocarbons.	Beanblossom, W. S.	AEC
2,566,065	Process for Photochemical Chlorination of Hydrocarbons.	Loverde, A. Beanblossom, W. S.	AEC
2,566,665	Zirconium and Hafnium Separation Process.	Huffman, E. H. Beaufait, L. J.	AEC
2,567,145	Method of Preparing Uranium Pentafluoride.	Carignan, C. J.	AEC
2,567,250	Aluminum Resinates and Method of Preparation.	St. Clair, W. E. Lawrence, R. V.	USDA
2,567,251	Analytical Selenium Strip and Method of Preparation Thereof.	Stitt, F.	USDA
2,567,518	Preparation of Beryllium Nitride	Langsdorf, A. S.	AEC
2,567,519	Pressure Monitoring Device	Livingston, R.	AEC
2,567,661	Zirconium and Hafnium Recovery and Purification Process.	Ayres, J. A.	AEC
2,567,968	Crystallization	Saeman, W. C.	TVA
2,568,642	Production of Dichlorododecafluoroheptane and Derivatives Thereof.	Krantz, K. W.	AEC
2,568,660	Fluorination Process	Rosen, R.	AEC
2,569,225	Method of Forming Uranium Monocarbide.	Carter, J. H. Daane, A. H.	AEC
2,569,644	Organic Fluorine Composition and Method of Making.	Stilmar, F. B.	AEC
2,570,119	Recovery of Carnotite from its Ores	Handley, R. W. Sawyer, C. W.	AEC
2,570,120	Process for Recovery of Pitchblende and Similar Uranium from Ores of Same by Special Flotation Practice.	Handley, R. W. Sawyer, C. W.	AEC
2,570,435	Catalytic Vapor Phase Fluorination Apparatus.	Downing, F. B. Roberts, J. B.	AEC
2,571,095	Method of Prevention of Deterioration in Seeds.	Altschul, A. M. Condon, M. Z. Lambou, M. G.	USDA
2,571,237	Adsorption Separation of Zirconium and Hafnium.	Hansen, R. S.	AEC
2,571,302	Sampler for Highly Radioactive Substances.	Smith, W. Q.	AEC
2,571,926	Preparation of Organic Materials	Murray, A. Ronzio, A. R.	AEC
2,571,965	Process for Production of Radioactive Iron.	Swartout, J. A.	AEC
2,572,156	Process of Producing Uranium Hexachloride.	Jenkins, F. A.	AEC
2,573,704	Making Calcium Fluoride	Gilbert, N. Hobbs, I. A.	TVA
2,574,268	Manufacture of Uranium Tetrachloride.	Kamen, M. D.	AEC
2,574,619	Process for the Preparation of Fluorocarbons.	Cady, G. H.	AEC
2,574,626	Uranium-Cobalt Alloy	Daane, A. H. Noyce, W. K.	AEC
2,574,627	Uranium-Cobalt Alloy	Daane, A. H. Noyce, W. K.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,574,649	Alkyl Ether of Chlorofluoroheptene	McBee, E. T. Barnhart, W. S.	AEC
2,574,842	Methods and Apparatus for Purifying and Packaging Uranium Hexachloride.	Prescott, C. H.	AEC
2,575,760	Preparation of Heavy Metal Borohydrides.	Hoekstra, H. R. Katz, J. J.	AEC
2,577,097	Method for Separation of Americium from Solutions Containing the Same.	Werner, L. B.	AEC
2,577,514	Method for Removal of Radioactive Contaminants.	DeMent, J.	AEC
2,577,739	Purification of Cobalt Sulfate Solution.	Churchward, R. E. Shelton, F. K.	Int
2,578,416	Methods of Making Neptunium Chlorides.	Fried, S. Davidson, N. R.	AEC
2,578,623	Concentration of Thorium	Asselin, G. F. Audrieth, L. F.	Navy
2,578,725	Process of Protecting Metals Against Corrosion.	Michel, J. M. Hager, K.	Army
2,579,234	Vacuum Seal for Fluorine Generation System.	Hubbard, D. O.	AEC
2,579,243	Method for the Production of Radioactive Isotopes.	Reid, A. F.	AEC
2,579,531	Process for Extracting Gold and Silver.	Zadra, J. B.	Int
2,580,349	Method of Forming Uranium Carbide.	Fisher, R. W.	AEC
2,580,357	Apparatus for the Preparation of Metal Halides.	Thompson, R. W. McDuffie, B. Schelberg, A. D.	AEC
2,581,863	Process for Electrodepositing Uranium Dioxide.	Kahn, M.	AEC
2,582,941	Process of Producing Uranium Chlorides.	Wilder, C. D.	AEC
2,583,549	Preparation of Pentaerythrityl Phosphates.	Daul, G. C. Reid, J. B.	USDA
2,585,901	Method of Isotope Analysis	Dieke, G. H.	AEC
2,586,027	Casting Apparatus	Gray, C. F.	AEC
2,588,041	Separation of Metal Values in Fluoride Compositions.	Perkins, M. A. Couper, M.	AEC
2,588,153	Method of Making Metal Hydride	Newton, A. S.	AEC
2,588,450	Process of Regenerating Activated Carbon Loaded with Absorbed Gold.	Zadra, J. B.	Int
2,589,272	Production of Calcium Metaphosphate.	Miller, P.	TVA
2,589,391	Boron Chloride Production from an Alloy of Boron with Tantalum.	Hutchison, C. A. Smith, J. S.	AEC
2,593,431	Reagent Conditioning for Electrostatic Separation of Minerals.	Fraas, F.	Int
2,598,729	Preparation of Drying Oils	Teeter, H. M.	USDA
2,599,326	Decomposition of Complex Metal Phosphate Salts.	Gruen, D. M. Katz, J. J.	AEC
2,599,946	Oxidation Inhibitors of U_3O_8	Sheft, I. Fried, S. M.	AEC
2,600,370	Uranium Borohydride and Method of Making the Same.	Schlesinger, H. I. Brown, H. C.	AEC
2,600,456	Promotion of Dithionate Ion Formation in Leaching Oxidic Manganese Ores with Sulfur Dioxide Solutions.	Wyman, W. F. Back, A. E.	Int
2,602,047	Method of Concentrating Isotopic Carbon.	Calvin, M. Weigl, J. W.	AEC
2,602,725	Method of Producing Zirconium Tetrafluoride.	Wilhelm, H. A. Walsh, K. A.	AEC
2,605,219	Preparation of Radioactive Bromine	Jacobson, H.	AEC
2,606,918	Preparation of Aldonic Acids	Isbell, H. S.	Com
2,610,104	Precipitation of Zirconium Hydroxide in a Readily Filterable Form.	Friedel, H. H.	AEC
2,611,748	Chemical Indicator for Alkyl-Chloroarsines.	Wilzbach, K. E.	Army
2,613,134	Oxidation of Phosphorus with Steam.	Elmore, K. L.	TVA
2,613,135	Oxidation of Phosphorus with Steam.	Shultz, J. F.	TVA
2,614,113	Uranium Purification as Complexes of Esters of Trifluoroacetoacetic Acid.	Schlesinger, H. I. Brown, H. C.	AEC
2,615,798	Extraction of Cerium with an Organic Solvent.	Pitzer, E. C.	AEC
2,616,847	Disposal of Radioactive Cations	Ginell, W. S.	AEC
2,618,570	Process for Preparing a Grouting Fluid.	Blackburn, W. C.	Int

Patent No.	Title of Invention	Inventor	Agency
2,622,008	Production of Carbon Dioxide	Miller, W. W Turkevich, J Zwiebel, N.	AEC
2,622,014	Method for Preparing Boron Trifluoride.	Kirshenbaum, I	AEC

SUBGROUP 28–21—Cyclic (coal-tar) crudes

The following patents relate to establishments engaged in manufacturing crudes from coal-tar. Such crudes include (1) light oils and light-oil products such as benzene and toluene; (2) coal-tar acids such as cresols and cresylic acid; and (3) products of medium and heavy oil such as creosote oil, naphthalene, anthracene, and their higher homologues, and tar. Coal-tar crudes in byproduct coke ovens are classified in Subgroup 29–32, and petroleum refineries which produce such products in Subgroup 29–11.

Patent No.	Title of Invention	Inventor	Agency
2,349,173	Manufacture of Alicyclic Compounds	Joshel, L. M	USDA
2,464,271	Coal Liquefaction by Hydrogenation	Storch, H. H Hirst, L. L	Int
2,503,292	Synthesis of Fluoranthene and its Derivatives.	Orchin, M Reggel, L.	Int
2,542,028	Apparatus for High-Frequency Retorting.	Hodge, V. M	Int
2,564,745	Soil Dispersing Apparatus	Wintermyer, A. M	GSA
2,587,671	Reduction of Oxygenated Thiophene Compounds.	Wender, I Orchin, M.	Int
2,590,096	Purification of Phenanthrene by Azeotropic Distillation.	Feldman, J Orchin, M.	Int
2,606,142	Hydrogenation Liquefaction of Coal Employing Zinc Catalysts.	Storch, H. H Pelipetz, M. G.	Int
2,606,143	Refining of Shale Oil	Smith, J. R Dinneen, G. U.	Int

SUBGROUP 28–22—Intermediates, dyes, color lakes, and toners

The following patents relate to establishments engaged in manufacturing cyclic intermediates, dyes, color lakes, and toners. Important products of this subgroup include: (1) derivatives of benzene, toluene, phenol, aniline, nitrobenzene, and other cyclic intermediates; (2) classified and unclassified dyes such as azo and anthraquinone, and food, drug, and cosmetic dyes; and (3) lakes and extended colors, toners or full strength organic colors, and reduced toners. Inorganic color pigments are classified in Subgroup 28–52.

Patent No.	Title of Invention	Inventor	Agency
2,133,289	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H	TVA
2,349,173	Manufacture of Alicyclic Compounds.	Joshel, L. M	USDA
2,377,571	Method of Preparing Trans-Quinitol Diacetate.	Nudenberg, W	USDA
2,379,494	Composition of Matter	Orchin, M Butz, L. W.	USDA
2,391,943	Nonbenzenoid Compounds	Butz, L. W	USDA
2,396,994	Condensation Products of Hydroxy Carboxylic Acids.	Filachione, E. M Fisher, C. H.	USDA
2,399,595	Process for Manufacturing Acyloxy Carboxylic Acids.	Filachione, E. M Fisher, C. H.	USDA
2,402,129	Process for Esterifying Acyloxy Carboxylic Acids.	Filachione, E. M	USDA
2,402,130	Process for the Production of Di-Esters of Hydroxy Carboxylic Acid.	Filachione, E. M Fisher, C. H.	USDA
2,405,267	3,6-Epoxycyclohexene	Nudenberg, W	USDA
2,405,540	Nonbenzenoid Compounds	Butz, L. W	USDA
2,405,646	Process of Manufacturing Volatile Esters of Hydroxy Carboxylic Acids.	Fisher, C. H Filachione, E. M.	USDA
2,411,762	9,10-Epoxyoctadecanol and Process for its Preparation.	Swern, D	USDA
2,466,116	Process of Purifying Carotene Contaminated with Cholorophyll and Xanthophyll.	Wall, M. E Kelley, E. G.	USDA
2,448,506	Production of Itaconic Acid	Ambler, J. A Curl, A. L.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,448,831	Production of Itaconic Acid	Roberts, E. J. Ambler, J. A. Curl, A. L.	USDA
2,481,366	Green Camouflage Paint	Thimann, K. V.	Navy
2,494,565	Paint Compositions from Catalytically Conjugated Oils.	Lewis, A. J. Moser, H. A. Cowan, J.	USDA
2,504,980	Ethers of 7-Hydroxyphenothiazone-3	Houston, D. F. Kester, E. B.	USDA
2,505,772	Alkyl Ethers of 3-Hydroxyphenothiazine.	Houston, D. F.	USDA
2,513,534	Purification of Cyclopenthanone	Turk, A.	Navy
2,516,120	Oxidative Method of Producing 7-Hydroxphenothiazone-3.	Houston, D. F.	USDA
2,518,456	Preparation of Acyloxy Carboxylic Acids from Esters of Hydroxy Carboxylic Acids.	Fein, M. L. Fisher, C. H.	USDA
2,519,319	Method of Preparing Chloranil	McBee, E. T. Newcomer, J. S.	AEC
2,526,213	Process for Production of Mesitylene	Ewalt, W. M.	AEC
2,532,279	Hydrogenated Furfuralacetofuran	Alexander, K.	USDA
2,533,696	Diborane Purification Process	Barbaras, G. D. Schaeffer, G. W.	AEC
2,534,250	Process of Isolating Quercitrin	De Eds, F. Booth, A. N.	USDA
2,534,255	Hydroxy Polyesters	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,538,024	Beta-Cyanoethyl Derivatives of Amino Acids and Process for Preparing Them.	McKinney, L. L. Cowan, J. C. Uhing, E. H.	USDA
2,543,817	Photochemical Oxidation of Nicotine	Weil, L.	USDA
2,559,607	Production of Furfural from Pentose Liquors.	Lathrop, E. C. Dunning, J. W. Frye, C. F.	USDA
2,559,624	Preparation of 7-Hydroxypheno-Thiazone-3.	Houston, D. F. Kester, E. B.	USDA
2,559,626	Dithiane Carboxylic Acids	Jansen, E. F.	USDA
2,563,806	Preparation of Substituted Bisaminophenyl Ethylene Glycols.	Allen, M. J.	HEW
2,556,052	Process for Photochemical Chlorination of Hydrocarbons.	Beanblossom, W. S.	AEC
2,566,065	Process for Photochemical Chlorination of Hydrocarbons.	Loverde, A. Beanblossom, W. S.	AEC
2,567,930	Preparation of Epoxy Compounds by Oxidation of Cis-Monoolefine Compounds.	Findley, T. W. Swern, D.	USDA
2,583,549	Preparation of Pentaerythrityl Phosphates.	Daul, G. C. Reid, J. B.	USDA
2,589,314	Preparation of Keto Acid Compounds.	Woods, L. C. Teeter, H. M.	USDA
2,595,221	Esters of Polyhydroxy-Benzoic Acids and Method for their Preparation.	Weil, J. K. Ault, W. C. Nutting, G. C.	USDA
2,610,196	Esters of Acylated Hydroxycarboxylic Acids.	Fisher, C. H. Fein, M. L.	USDA
2,614,121	Process for Making Intermediates for Producing Basic Compounds.	Price, C. C. Roberts, R. M.	Army

SUBGROUP 28–23—Plastic materials and elastomers, except synthetic rubber

The following patents relate to establishments engaged in manufacturing plastic materials in the form of sheets, rods, tubes, granules, powders, or liquids for use in further manufacturing. Included are (1) condensation plastics such as alkyd, phenolic, and urea resins; (2) polymerization plastics, except fibers, such as polyvinyl alcohol, ester, halide, and copolymer resins; polyhexamethylenediamine adipamide resins; (3) protein plastics such as casein, soy-bean, and coffee-bean; (4) cellulose plastics, regenerated cellulose sheets, and vulcanized fiber; (5) carbohydrate plastics; and (6) synthetic elastomers such as plasticized polyvinyl alcohol, polyvinyl chloride, polyisobutylene elastomers and other similar products. Rayon and other synthetic fibers are classified in Subgroup 28–25, synthetic rubber in Subgroup 28–24.

Patent No.	Title of Invention	Inventor	Agency
2,130,783	Plastic Compositions	Sherrard, E. C. Beglinger, E. Hohf, J. P. Bateman, E.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,137,119	Plastic Compositions	Sherrard, E. C Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,146,655	Products Obtained from the Hydrogenation of Lignin in the Presence of Suitable Catalysts.	Sherrard, E. C Harris, E. E.	USDA
2,151,412	Process for the Utilization of Sawdust for the Production of Plastics.	Sherrard, E. C Beglinger, E. Hohf, J. P. Bateman, E. Mitchell, R. L.	USDA
2,153,316	Method for the Production of Plastics.	Sherrard, E. C Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,181,231	Synthetic Thermoplastic Resins	Groggins, P. H Stearn, J. T. Makower, B.	USDA
2,212,866	Plastic Chlorinated Vegetable Fibrous Material.	Sherrard, E. C Beglinger, E. Hohf, J. P. Bateman, E.	USDA
2,220,624	Process for the Hydrogenation of Lignin and Waste Pulp Liquors and the Products Thereof.	Sherrard, E. C Harris, E. E. Saeman, J. F.	USDA
2,238,307	Thermoplastic Protein Material	Brother, G. H McKinney, L. L.	USDA
2,248,056	Film Processing System	Blaney, J. M	Army
2,262,422	Protein Plastic Molding Compound and Method of Preparing the Same.	Brother, G. H McKinney, L. L.	USDA
2,285,059	Process for Preparing Aldehydes	Scanlan, J. T Swern, D.	USDA
2,298,017	Process for Plasticizing Lignocellulosic Materials.	Loughborough, W. K.	USDA
2,304,064	Process for Producing Aldehydes	Scanlan, J. T Swern, D.	USDA
2,309,380	Process for Producing Protein Plastics.	Brother, G. H McKinney, L. L.	USDA
2,328,749	Process for Simultaneously Manufacturing Pulp and Hydrogenated Products from Lignocellulose.	Sherrard, E. C Harris, E. E.	USDA
2,333,679	Process for Protecting Plastics During Curing or Molding.	Schoonover, I. C Dickson, G. R.	Com
2,344,267	Proteinous Compositions and Their Process of Production.	Reitz, H. C	USDA
2,345,079	Process for the Production of Aconitic Acid.	Ventre, E. K Henry, H. C. Gayle, F.	USDA
2,355,330	Allyl and Methallyl Esters of Alpha-Hydroxy-Isobutyric and Alpha-Acetoxy-Isobutyric Acids.	Rehberg, C. E Fisher, C. H.	USDA
2,357,839	Plastic Composition	Manley, R. H Evans, C. D.	USDA
2,359,512	Elastic Impression Compositions	Dickson, G. R Schoonover, I. C.	Com
2,359,537	Process for the Extraction of Aconitic Acid from Plant Juices.	Ventre, E. K Ambler, J. A. Byall, S. Henry, H. C.	USDA
2,361,438	Light Weight Plastic Composition and Method.	Turner, P. S	Com
2,363,103	Coating Materials and Process for Making Them.	Watson, P. D	USDA
2,367,798	Allyl and Methallyl Esters of Lactic and Alpha-Acetoxypropionic Acids.	Rehberg, C. E Fisher, C. H.	USDA
2,370,266	Protein Product and Process for Making Same.	Smith, A. K Max, H. J. Wheeler, D. H.	USDA
2,372,437	Filter Medium	Lathrop, E. C Aronovsky, S. I.	USDA
2,373,015	Process for Producing Polymeric Materials.	Cowan, J. C Ault, W. C.	USDA
2,378,501	Process for Manufacturing Acrylic Esters and other Unsaturated Compounds by Thermal Decomposition.	Ratchford, W. P Fisher, C. H.	USDA
2,388,440	Beta-Chloroallyl Acrylates	Rehberg, C. E Fisher, C. H.	USDA
2,390,326	Allyl and Substituted Allyl Methacrylates.	Rehberg, C. E Fisher, C. H.	USDA
2,390,327	Allyl and Substituted Allyl Acrylates.	Rehberg, C. E Fisher, C. H.	USDA
2,391,489	Method of Molding	Stamm, A. J Turner, H. D.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,399,595	Process for Manufacturing Acyloxy Carboxylic Acids.	Filachione, E. M. Fisher, C. H.	USDA
2,405,830	Process of Recovering Peanut Protein.	Irving, G. W. Merrifield, A. L. Burnett, R. S. Parker, E. D.	USDA
2,405,973	Preparation of Starch Ethers	Nichols, P. L. Hamilton, R. M.	USDA
2,406,369	Preparation of Organic Solvent-Soluble Unsaturated Carbohydrate Ethers and Products Produced Thereby.	Hamilton, R. M. Nichols, P. L.	USDA
2,406,561	Azeotropic Distillation of Methanol from Admixture with Acrylic Esters.	Rehberg, C. E.	USDA
2,408,177	Improved Process for the Manufacture of Methyl Acrylate by the Thermal Decomposition of Methyl Alpha-Acetoxypropionate.	Ratchford, W. P. Fisher, C. H.	USDA
2,410,551	Allyl and Methallyl Esters of Lactic and Alpha-Acetoxypropionic Acids.	Rehberg, C. E. Fisher, C. H.	USDA
2,411,762	9,10-Epoxyoctadecanol and Process for its Preparation.	Swern, D.	USDA
2,413,889	Production of Acrylic Acid	Rehberg, C. E. Fisher, C. H.	USDA
2,414,589	Process for Purifying Acrylic Esters	Fein, M. L. Fisher, C. H.	USDA
2,418,224	Cellulose Acetate Plasticized with an Aryl Morpholidophosphate.	Georges, L. W.	USDA
2,420,234	Purification of Lactic Acid	Filachione, E. M. Fisher, C. H.	USDA
2,423,089	Process for the Manufacture of Phenyl and Substituted Phenyl Acrylates and their Polymers.	Filachione, E. M. Fisher, C. H.	USDA
2,425,523	Phenyl and Tolyl-Alpha-Acetoxypropionate and Process for their Preparation.	Filachione, E. M. Fisher, C. H.	USDA
2,425,550	Process of Making Oriented Regenerated Protein Products.	Lundgren, H. P.	USDA
2,427,497	Process for the Isomerization of Allo-Ocimene.	Goldblatt, L. A.	USDA
2,427,506	Process for Deploymerizing Allo-Ocimene Polymers.	Oldroyd, D. M. Savich, T. R. Goldblatt, L. A.	USDA
2,427,699	Crown Closures	Lathrop, E. C. Aronovsky, S. I. Talburt, W. F.	USDA
2,429,679	Composition Containing a Cellulose Compound and a Morpholide.	Georges, L. W.	USDA
2,432,223	Process for the Elimination of Magnesium from Insoluble Alkaline Earth Aconites.	Ambler, J. A. Roberts, E. J.	USDA
2,433,721	Polylactylic Acid Resins and Process for Making Them.	Watson, P. D.	USDA
2,433,849	Cork Substitute and a Process for Its Production.	Lathrop, E. C. Aronovsky, S. I.	USDA
2,433,866	Method of Making Furfuryl Acrylate.	Rehberg, C. E. Fisher, C. H.	USDA
2,433,905	Method for the Crystallization of Albumin and the Preparation of Protein Products Therefrom.	Hughes, W. L.	Army
2, 437,946	Plasticized Prolamine Composition	Evans, C. D. Manley, R. H.	USDA
2,438,278	Method for Azeotropic Distillation of Acetic Anyhdride.	Fisher, C. H. Fein, M. L.	USDA
2,438,281	Method for Processing Plastic Sheets	Gordon, S.	Army
2,442,897	Process for Resinifying Lignocellulosic Materials with Urea-Formaldehyde.	Loughborough, W. K.	USDA
2,443,280	Hydroxylation Process	Swern, D. Scanlan, J. T.	USDA
2,445,028	Method of Dispersing Keratin Proteins with Amides and the Composition Resulting Therefrom.	Jones, C. B. Mecham, D. K.	USDA
2,445,029	Method of Dispersing Keratin Protein with Ammonium Thiocyanate and the Composition Resulting Therefrom.	Jones, C. B. Mecham, D. K.	USDA
2,445,084	Plasticized Ethyl Cellulose Composition.	Fisher, C. H. Rehberg, C. E. Mast, W. C.	USDA
2,445,085	Plasticized Composition Containing a Cellulose Ether and a Polyacrylic Acid Ester.	Rehberg, C. E. Mast, W. C. Fisher, C. H.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,445,925	Acrylic Esters of Secondary Alcohols.	Rehberg, C. E. Fisher, C. H.	USDA
2,445,931	Process of Extraction from Vegetable Materials.	Beckel, A. C. Belter, P. A. Smith, A. K.	USDA
2,446,251	Joint Fillers	Stricklin, T. W.	AEC
2,447,693	Process for the Manufacture of Esters of Hydroxy Carboxylic Acids.	Filachione, E. M. Fisher, C. H.	USDA
2,447,860	Method of Dispersing Keratin Proteins and the Composition Resulting Therefrom.	Jones, C. B. Mecham, D. K.	USDA
2,448,506	Production of Itaconic Acid	Ambler, J. A. Curl, A. L	USDA
2,448,602	Glycidyl Esters	Kester, E. B. Preusser, H. M.	USDA
2,448,831	Production of Itaconic Acid	Roberts, E. J. Ambler, J. A. Curl, A. L.	USDA
2,448,873	Phenoxyethyl Lactate and a Cellulose Compound Plasticized Therewith.	Fein, M. L. Fisher, C. H.	USDA
2,449,152	Separation of Monoethanol Amine from Admixtures by Azeotropic Distillation with Chlorobenzene.	Speck, J. C.	Navy
2,449,812	Water Soluble Coating Composition for Paper.	Hervey, L. R. Whitaker, A. C.	Army
2,449,816	Plastic Material from Allyl Starch	Nichols, P. L. Hamilton, R. M.	USDA
2,449,828	Polylactylic Acid Resins and Process for Making Them.	Watson, P. D.	USDA
2,450,940	Polyamides from Polymeric Fat Acids.	Cowan, J. C. Falkenburg, L. B. Teeter, H. M. Skell, P. S.	USDA
2,452,209	Cellulose Ether Plasticized with Bis-(Allyl Lactate) Maleate.	Rehberg, C. E. Fisher, C. H.	USDA
2,453,264	Cellulose Ester or Ether Plasticized with Ethyl Alpha-Carbethoxyethoxyethyl Carbonate.	Rehberg, C. E.	USDA
2,453,559	Polylactylic Acid Resins and Process for Making Them.	Watson, P. D.	USDA
2,454,756	Process for the Polymerization of Furfuryl Acrylate.	Rehberg, C. E. Fisher, C. H.	USDA
2,456,295	Coating Compositions	Mast, W. C.	USDA
2,456,647	Acrylic Esters of Olefinic Alcohols and Polymers thereof and Method of Making Them.	Rehberg, C. E. Fisher, C. H.	USDA
2,457,329	Polymers of 9,10-Epoxyoctadecanol and Process for Their Preparation.	Swern, D. Billen, G. N.	USDA
2,458,191	Resinous Compositions of Starch Ethers with Other Resins.	Nichols, P. L. Smith, L. T.	USDA
2,458,772	Polymerizing the Glyceryl Ester of Levo-Pimaric Acid-Maleic Anhydride Adduct.	Fleck, E. E.	USDA
2,458,888	Acrylic Esters of Ether-Alcohols	Rehberg, C. E. Fisher, C. H.	USDA
2,459,222	Introduction of Amino Groups into Cellulose.	Guthrie, J. D.	USDA
2,460,980	Process for the Preparation of Isocyanate Derivatives of Proteins.	Fraenkel-Conrat, H. L. Olcott, H. S.	USDA
2,461,746	Aerator	Lathrop, E. C. Aronovsky, S. I.	USDA
2,462,817	Copolymers of Tetra-Allyl Pentaerythritol.	Smith, L. T.	USDA
2,462,981	Method for the Production of Itaconic Acid.	Lockwood, L. B. Moyer, A. J.	USDA
2,463,608	Process for Purifying Acrylic Esters.	Fein, M. L. Fisher, C. H.	USDA
2,463,869	Mixed Allyl Ethers of Starch	Hamilton, R. M. Yanovsky, E.	USDA
2,464,992	Esters of Acyloxycarboxylic Acids	Rehberg, C. E. Fisher, C. H.	USDA
2,473,544	Polyalkyl-Cyclohexanol Acrylates	Rehberg, C. E. Fisher, C. H.	UDSA
2,474,339	Keratin Derivatives and Process of Preparation Thereof.	Ward, W. H. Binkley, C. H.	USDA
2,474,367	Method of Treating Hydrophilic Colloids to Avoid Swelling During Washing.	Ramage, W. D.	USDA
2,475,557	Copolymers of Unsaturated Esters of 9,10-Dihydroxystearic Acid.	Swern, D. Dickel, G. B.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,476,957	Process for Producing Films of Chromated Proteins on Zinc.	Brenner, A. Seegmiller, R. Riddell, G. E.	Com
2,477,116	Protective Coating Compositions and Methods for Producing the Same.	Cowan, J. C. Teeter, H. M.	USDA
2,477,293	Aryl Acrylates and Methacrylates and Their Polymers.	Filachione, E. M. Fisher, C. H.	USDA
2,483,791	Diene Addition Product and Process for Making It.	Teeter, H. M. Scholfield, C. R. Cowan, J. C.	USDA
2,485,896	Method for Shaping Articles of Methyl Methacrylate Resin.	Lucas, H. J. Hepner, F. R.	Navy
2,491,533	Ethers of 9,10-Dihydroxyoctadecanol.	Swern, D.	USDA
2,492,203	Esters of Methacrylic Acid	Treadway, R. H.	USDA
2,494,565	Paint Compositions from Catalytically Conjugated Oils.	Lewis, A. J. Moser, H. A. Cowan, J.	USDA
2,494,583	Pyrolysis of C-Acetoxy Aliphatic Amides to Acrylamides.	Ratchford, W. P. Fisher, C. H.	USDA
2,498,694	Preparation of Aqueous Dispersions by Polymerization in the Presence of Ammonium Alginate.	Mast, W. C.	USDA
2,502,498	Lignocellulose, Phenol Formaldehyde and Inorganic Filler Molding Composition.	Williamson, R. V. Clark, T. F.	USDA
2,504,151	A Process of Preparing Methyl Beta-Furfuryloxypropionate.	Rehberg, C. E. Fisher, C. H.	USDA
2,504,980	Ethers of 7-Hydroxyphenothiazone-3.	Houston, D. F. Kester, E. V.	USDA
2,504,989	Modified Rosin Esters	Lawrence, R. V. Kaufmann, M. W.	USDA
2,505,749	Vegetable Oil Extraction	Deobald, H. J. Beckel, A. C. Belter, P. A.	USDA
2,511,880	Resins of Alkyl-Substituted Cycloalkanol Esters of Acrylic Acids.	Rehberg, C. E. Fisher, C. H.	USDA
2,516,928	Copolymers of Unsaturated Ethers.	Swern, D.	USDA
2,517,572	Process of Utilizing Detergents to Solubilize Keratin Materials.	Jones, C. B. Mecham, D. K.	USDA
2,517,585	N-(2-Cyanoethyl)-2-Pyrrolidone-5-Carboxylic Acid and Methods for its Preparation.	Uhing, E. H. Cowan, J. C. McKinney, L. L.	USDA
2,520,913	Phenolic Molding Resins	Clark, T. F.	USDA
2,520,963	Production of Improved Cellulosic Materials.	Reeves, R. E.	USDA
2,524,792	Process for Solubilizing Allyl Starch.	Hamilton, R. M. Yanovsky, E.	USDA
2,525,107	Coating Composition for Metals	Whiting, L. R. Wangner, P. F.	Navy
2,525,792	Acylated Protein and Method for Making Same.	Gordon, W. G. Brown, A. E. Jackson, R. W.	USDA
2,525,825	Process for Making Casein Fibers for Felting.	Peterson, R. F. Jackson, R. W.	USDA
2,527,597	Esters of Oleic Acid with Unsaturated Alcohols.	Swern, D. Dickel, G. B.	USDA
2,534,255	Hydroxy Polyesters	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,541,126	Unsaturated Esters of 10-Hendecenoic Acid.	Swern, D. Jordan, E. F.	USDA
2,541,142	Unsaturated Ether-Esters of Polyhydric Alcohols.	Zief, M. Yanovsky, E.	USDA
2,542,062	Ether-Esters of Dihydroxystearic Acid.	Swern, D.	USDA
2,542,984	Method of Solubilizing Keratin	Binkley, C. H.	USDA
2,543,060	Carbonic Acid Derivatives of Tetrahydrofurfuryl Lactate.	Rehberg, C. E.	USDA
2,545,446	Phenolic Molding Resins	Clark, T. F.	USDA
2,545,492	Fabrics of a Long Chain Amino-Ethoxy Cellulose and the Method of Making the Same.	Reid, J. D. Dual, G. C.	USDA
2,550,682	Coating Compositions	Falkenburg, L. B. Lewis, A. J. Cowan, J. C.	USDA
2,550,703	Coating Compositions from Soybean Oils.	Lewis, A. J. Moser, H. A. Cowan, J. C.	USDA
2,555,385	Metallic Polylactyllactate Polymers.	Watson, P. D.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,559,259	Method of Making a Source of Beta Rays.	Raper, J. R.	AEC
2,559,345	Casting Method and Compositions	Tyler, H. R. Church, J. S.	AEC
2,559,607	Production of Furfural from Pentose Liquors.	Lathrop, E. C. Dunning, J. W. Frye, C. F.	USDA
2,559,660	Cyanoethylation of Alkyl Lactates	Rehberg, C. E.	USDA
2,562,198	N-Beta-Propionic Acid Derivatives of Alpha-Amino Acids.	McKinney, L. L. Uhing, E. H. Setzkorn, E. A. Cowan, J. C.	USDA
2,562,204	Process for Producing Flexible Hollow Plastic Articles.	Milton, C. L.	Army
2,562,955	Silicon Containing Derivatives of Cellulosic Material.	Schuyten, H. A. Weaver, J. W. Reid, J. D.	USDA
2,564,024	Method of Making Halocarbon Polymers.	Miller, W. T.	AEC
2,565,487	Production of Esters	Filachione, E. M. Fisher, C. H.	USDA
2,567,250	Aluminum Resinates and Method of Preparation.	St. Clair, W. E. Lawrence, R. V.	USDA
2,567,930	Preparation of Epoxy Compounds by Oxidation of Cis-Monoolefine Compounds.	Findley, T. W. Swern, D.	USDA
2,567,956	High-Pressure Polymerization of Perhaloolefins.	Miller, W. T.	AEC
2,569,502	Epoxidized Oils	Swern, D. Findley, T. W.	USDA
2,573,639	Manufacture of Porous Articles from Trifluorochloroethylene Polymer.	Coler, M. A.	AEC
2,573,701	Polyethylene Glycol Esters of Acyloxycarboxylic Acids.	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,575,337	Sealing Device for Dry Cells	Ellis, G. B.	Army
2,578,259	Copolymerization Process and Product.	McMillan, E. B.	Navy
2,578,684	Glycol Esters of Acyloxycarboxylic Acids.	Fisher, C. H. Filachione, E. M. Fein, M. L.	USDA
2,579,526	Process for the Fractionation of Cottonseed.	Spadaro, J. J. Pollard, E. F. Gastrock, E. A. Vix, H. L. Murphey, C. H. Persell, R. M.	USDA
2,580,391	Fiberboard Construction	Babcock, G. E. Johnsen, V. L. Smith, A. K.	USDA
2,582,235	Synthetic Resins from Maleic Anhydride-Alkyl Oleate Adduct and an Alkylene Diamine.	Cowan, J. C. Teeter, H. M.	USDA
2,582,239	Water Repellent Treatment of Textiles with Long Chain Substituted Phenol Aldehyde Resin Emulsion.	Dodd, C. G.	Army
2,584,114	Method of Making Partially Carboxymethylated or Phosphorylated Cellulosic Fibrous Materials Crease Resistant and Dye Resistant.	Daul, G. C. Reid, J. D.	USDA
2,584,970	Reduction of Oxydivaleronitrile	Alexander, K. Schniepp, L. E.	USDA
2,586,182	Polymer Polysulfides Containing Ether Groups.	Signaigo, F. K.	Navy
2,587,591	Cotton Filled Structural Material and Process of Preparing the Same.	Busby, H. S. Ward, W. L.	USDA
2,587,623	Acylation of Dextran in Formamide	Jeanes, A. R. Wilham, C. A.	USDA
2,588,398	Preparation of Granular Polymers	Mast, W. C. Fisher, C. H.	USDA
2,589,314	Preparation of Keto Acid Compounds.	Woods, L. C. Teeter, H. M.	USDA
2,590,852	Esters of Acylated Lactic Acid	Fein, M. L. Fisher, C. H.	USDA
2,594,293	Acrylonitrile Protein Derivatives	McKinney, L. L. Cowan, J. C. Evans, C. D.	USDA
2,594,303	Modified Drying Oils	Fisher, C. H. Zief, M. Hockett, R. C.	USDA
2,598,283	Copolymers of Perfluoropropene and Tetrafluoroethylene and Method of Making Same.	Miller, W. T.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,598,411	Rearrangement of Saturated Halocarbons.	Miller, W. T. Fager, E. W.	AEC
2,599,549	Production of Alpha-Carbalkoxy-Alkyl Methacrylates.	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,599,573	Method of Making Flexible Resinous Replicas.	Milton, C. L. Nielson, C. A.	Army
2,606,325	Age and Stain Resisting Article of Plasticized Polyvinyl Chloride.	Neilson, C. A. Leonard, F. Cort, I.	Army
2,606,881	Polymerization of Polyallyl and Polymethallyl Ethers of Polyhydroxy Compounds.	Zief, M. Yanovsky, E.	USDA
2,608,723	Process for the Production of Amylose Films.	Wolff, I. A. Davis, H. A. Cluskey, J. E. Gundrum, L. J.	USDA
2,609,360	Process of Reacting Polyvinyl-Alcohol with Urea Phosphate.	Daul, G. C. Reid, J. D.	USDA
2,610,953	Polyvinyl Phosphoric Acid Esters of Cellulose and Processes for Making the Same.	Daul, G. C. Reid, J. D.	USDA
2,613,157	Polymeric Plasticizers	Knight, H. B.	USDA
2,615,914	Alkyl Carbonates of Lactates	Rehberg, C. E.	USDA
2,623,864	Polymerization of Allylic Ethers	Wrigley, A. N. Yanovsky, E. Nichols, P. L.	USDA

SUBGROUP 28–24—Synthetic rubber

The following patents relate to establishments engaged in manufacturing synthetic rubber by polymerization or copolymerization. Important products of this subgroup include GR–S, GR–N, Butyl, Neoprene, Thiokol, and all other vulcanizable elastomers.

Patent No.	Title of Invention	Inventor	Agency
2,373,015	Process for Producing Polymeric Materials.	Cowan, J. C. Ault, W. C.	USDA
2,384,443	Plastic Composition and Method of Preparing Same.	Cowan, J. C. Teeter, H. M.	USDA
2,399,595	Process for Manufacturing Acyloxy Carboxylic Acids.	Filachione, E. M. Fisher, C. H.	USDA
2,411,033	Process for the Coagulation of Castilloa Latex.	Ford, T. F.	USDA
2,420,234	Purification of Lactic Acid	Filachione, E. M. Fisher, C. H.	USDA
2,427,497	Process for the Isomerization of Allo-Ocimene.	Goldblatt, L. A.	USDA
2,427,506	Process for Depolymerizing Allo-Ocimene Polymers.	Oldroyd, D. M. Savich, T. R. Goldblatt, L. A.	USDA
2,429,219	Process of Making Linear Superpolyesters.	Cowan, J. C. Wheeler, D. H.	USDA
2,435,478	Polyamides from Polyoctadecapolyenylamine.	Teeter, H. M. Cowan, J. C.	USDA
2,437,759	Process of Pyrolyzing Alpha-Pinene to Allo-Ocimene in Liquid Phase.	Savich, T. R. Goldblatt, L. A.	USDA
2,449,612	Synthetic Rubberlike Materials	Mast, W. C. Rehberg, C. E. Fisher, C. H.	USDA
2,450,101	Material for Use in the Manufacture of Ear Defenders and the Like.	Veneklasen, P. S. Watson, N. A.	Navy
2,452,092	Rubberlike Product and Process of Preparation.	Ault, W. C. Schaeffer, B. B.	USDA
2,452,209	Cellulose Ether Plasticized with Bis-(Allyl Lactate) Maleate.	Rehberg, C. E. Fisher, C. H.	USDA
2,453,858	Process for Obtaining Rubber from Goldenrod Leaves.	Porges, N. Pollard, E. F. Spadaro, J. J.	USDA
2,465,888	Butadiene Emulsion Polymerization in the Presence of Levo-Pimaric Acid-Maleic Anhydride Addition Product Esters.	Lawrence R. V.	USDA
2,465,901	Butadiene Emulsion Polymerization in the Presence of Levo-Pimaric Acid-Maleic Anhydride Addition Product.	Lawrence, R. V. McKennon, F. L.	USDA
2,467,126	Production of Mono-Alkyl Esters of the Addition Product of Levo-Pimaric Acid with Maleic Anhydride.	Graff, M. M.	USDA
2,492,169	Synthetic Rubberlike Materials from an Alkyl Acrylate and a Diolefinically Unsaturated Ether.	Mast, W. C. Smith, L. T. Fisher, C. H.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,492,170	Synthetic Rubberlike Materials from an Alkyl Acrylate and Haloalkyl Acrylate.	Mast, W. C Rehberg, C. E. Fisher, C. H.	USDA
2,495,757	Low-Methoxyl Polyvalent Metal Pectinate Fibers.	Owens, H. S Lotzkar, H.	USDA
2,504,989	Modified Rosin Esters	Lawrence, R. V Kaufmann, M. W.	USDA
2,507,546	Process for Producing Myrcene from Beta-Pinene.	Savich, T. R Goldblatt, L. A.	USDA
2,509,513	Synthetic Rubberlike Materials	Mast, W. C Fisher, C. H.	USDA
2,549,763	Process of Isolating Betaine from Guayule Extract.	Banigan, T. F Meeks, J. W. Planck, R. W.	USDA
2,562,191	Process for Coagulating Synthetic Latices.	Howerton, W. W	USDA
2,567,930	Preparation of Epoxy Compounds by Oxidation of Cis-Monoolefine Compounds.	Findley, T. W Swern, D.	USDA
2,567,956	High-Pressure Polymerization of Perhaloolefins.	Miller, W. T	AEC
2,569,502	Epoxidized Oils	Swern, D Findley, T. W.	USDA
2,579,492	Vulcanization of Polymerized Acrylic Esters.	Hansen, J. E Dietz, T. J.	USDA
2,600,414	Vulcanization of Acrylic Resins	Mast, W. C Rehberg, C. E. Fisher, C. H.	USDA
2,618,670	Process for Deresinating Rubber from Plants.	Clark, F. E	USDA

SUBGROUP 28–25—Synthetic fibers

The following patents relate to establishments engaged in manufacturing rayon, nylon, and other synthetic fibers. Important products of this subgroup include fibers of cellulose acetate, regenerated cellulose, polyvinyl ester, polyvinylidene chloride, vinyl chloride, polymeric amide, and protein.

Patent No.	Title of Invention	Inventor	Agency
2,425,550	Process of Making Oriented Regenerated Protein Products.	Lundgren, H. P	USDA
2,428,843	Flame-Resistant Cellulosic Material and Process for Producing Same.	Georges, L. W Hamalainen, C.	USDA
2,445,028	Method of Dispersing Keratin Proteins with Amides and the Composition Resulting Therefrom.	Jones, C. B Mecham, D. K.	USDA
2,445,029	Method of Dispersing Keratin Protein with Ammonium Thiocyanate and the Composition Resulting Therefrom.	Jones, C. B Mecham, D. K.	USDA
2,447,860	Method of Dispersing Keratin Proteins and the Composition Resulting Therefrom.	Jones, C. B Mecham, D. K.	USDA
2,453,150	Polyesters of Dimethylene D-Gluconic Acid.	Mehltretter, C. L	USDA
2,459,708	Dispersions of Proteins in Aqueous Detergents.	Lundgren, H. P	USDA
2,462,933	Process for Manufacturing Artificial Fiber from Proteins Contained in Cottonseed.	Arthur, J. C Pomes, A. F Karon, M. L. Altschul, A. M.	USDA
2,463,740	Preparation of Peanut Protein Free from Peanut Skin Pigment.	Burnett, R. S	USDA
2,471,583	Stabilization of Nitrocellulose	Reeves, R. E Giddens, J. E.	USDA
2,478,248	Method of Producing Prolamine Filaments.	Croston, C. B Evans, C. D.	USDA
2,495,757	Low-Methoxyl Polyvalent Metal Pectinate Fibers.	Owens, H. S Lotzkar, H.	USDA
2,495,767	Preparation of Fibers from Carboxymethylcellulose.	Reid, J. D Daul, G. C.	USDA
2,512,674	Production of Casein Yarn	Peterson, R. F	USDA
2,517,572	Process of Utilizing Detergents to Solubilize Keratin Materials.	Jones, C. B Mecham, D. K.	USDA
2,517,585	N-(2-Cyanoethyl)-2-Pyrrolidone-5-Carboxylic Acid and Methods for its Preparation.	Uhing, E. H Cowan, J. C. McKinney, L. L.	USDA
2,520,963	Production of Improved Cellulosic Materials.	Reeves, R. E	USDA
2,521,704	Fibers from Zein	Evans, C. D Ofelt, C. W. Smith, A. K.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,521,738	Process for the Production of Artificial Bristles and the Like from Proteins.	McKeekin, T. L. Reid, T. S. Warner, R. C. Jackson, R. W.	USDA
2,524,042	Curing Prolamine Fibers with Aldehyde in Liquid Organic Medium.	Croston, C. B. Evans, C. D. McKinney, L. L. Cowan, J. C.	USDA
2,525,825	Process for Making Casein Fibers for Felting.	Peterson, R. F. Jackson, R. W.	USDA
2,531,383	Stabilization of Viscous Dispersions of Cottonseed Proteins.	Arthur, J. C.	USDA
2,542,052	Polyvalent Metal Pectinate Films	Owens, H. S. Schultz, T. H.	USDA
2,583,574	Acrolein and Sulfur Halide Process to Strengthen Protein Fibers.	Thorsen, W. J. Lundgren, H. P. Jones, H. W.	USDA
2,594,293	Acrylonitrile Protein Derivatives	McKinney, L. L. Cowan, J. C. Evans, C. D.	USDA
2,617,707	Process of Making Soluble Yarns and Threads of Partially Carboxymethylated Cotton.	Daul, G. C. Reid, J. D.	USDA

SUBGROUP 28–26—Explosives

The following patents relate to establishments engaged in manufacturing explosives such as sporting powder, blasting powder, high explosives, nitrated carbohydrates, safety fuses, and blasting and detonating caps.

Patent No.	Title of Invention	Inventor	Agency
2,297,538	Liquid Oxygen Explosive	Denues, A. R.	Int
2,395,341	Process for Preparing Pentolite	McCurdy, G. W.	Army
2,404,887	Stabilization of Nitrocellulose	Reeves, R. E. Giddens, J. E.	USDA
2,412,658	Charging Mechanism	Stuart, J. Wassen, K.	Army
2,415,806	Compound Detonators	Bain, C. J. Carl, L. R.	Army
2,415,848	Black Powder	Rinkenbach, W. H. Allison, V. C.	Army
2,437,694	Method for Blending Powder Grains	Hickman, C. N.	Army
2,440,267	Propellant and Process for Manufacturing.	Hale, G. C.	Army
2,443,586	Extrusion Machine Seal	Stuart, J.	Army
2,449,625	Die Assembly	Stuart, J.	Army
2,453,404	Apparatus for Making Plastic Masses	Bohlman, W. S. Bruce, D. S.	Army
2,464,179	Smokeless Powder Tester	Hickman, C. N. Dempster, A. J.	Navy
2,471,583	Stabilization of Nitrocellulose	Reeves, R. E. Giddens, J. E.	USDA
2,479,727	Elimination of Fissures with Carbon Dioxide.	Daniels, F.	Army
2,481,283	Preparation of Nitratoalkyl Nitramines.	Blomquist, A. T. Fiedorek, F. T.	Navy
2,482,089	Method of Making a High-Density Explosive.	Audrieth, L. F. Sager, D. D.	Army
2,482,090	Method of Making a High-Density Explosive.	Audrieth, L. F. Sager, D. D.	Army
2,482,091	Method of Making a High-Density Explosive.	Audrieth, L. F. Sager, D. D.	Army
2,485,855	Nitramines	Blomquist, A. T. Fiedorek, F. T.	Navy
2,485,858	Milling Machine	Boykin, R. O.	Navy
2,495,216	Method of Manufacturing Propellants.	Longwell, P. A. Ayers, A. D. Sage, B. H.	Navy
2,498,388	Explosive Composition	Ball, A. M.	Army
2,499,295	Art of Making Propellant Powder	Bruce, D. S. Klien, E. L.	Army
2,501,082	Delayed Action Electric Flare Fuse	Oliver, N. J.	Army
2,516,323	Safety Gate	Jordan, J. D.	Navy
2,524,208	Method of Detecting Flaws in Solid Bodies.	Piper, W. E.	Army
2,549,005	Large Grain Smokeless Powder	Preckel, R. F.	Army
2,577,298	Flashless Powder Sheet	Ball, A. M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,606,109	Plastic Nonhardening Explosive Composition and Method of Forming Same.	Eyster, E. H. Weltman, C. A. Kistiakowsky, G. B. MacDougall, D. P.	Army

SUBGROUP 28–29—Industrial organic chemicals, not elsewhere classified.

The following patents relate to establishments engaged in manufacturing industrial organic chemicals, not elsewhere classified. Important products include: (1) noncyclic organic chemicals such as acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts; chloral, formaldehyde, and methylamine; (2) solvents such as amyl, butyl, and ethyl alcohols; methanol; ethylene glycol; amyl, butyl, and ethyl acetates; ethyl ether, ethylene glycol ether, and diethylene glycol ether; acetone, carbon disulfide, and carbon tetrachloride; (3) synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharine, citral, citronellal, synthetic geraniol, ionone, terpineol, and synthetic vanillin; (4) rubber chemicals such as accelerators and anti-oxidants; (5) plasticizers such as synthetic camphor, phthalates and tricresyl and triphenyl phosphates; (6) synthetic tanning materials; and (7) chemical-warfare gases. Cyclic crudes are classified in Subgroup 28–21 and synthetic rubber in Subgroup 28–24.

Patent No.	Title of Invention	Inventor	Agency
2,044,502	Process for the Purification of Pyrethrin Concentrates.	Haller, H. L. LaForge, F. B.	USDA
2,044,772	Preservative and Marine Growth Arresting Process.	Conn, W. T.	Com
2,044,773	Preservative and Marine Growth Arresting Process.	Conn, W. T.	Com
2,088,006	Ink	Zimmerman, E. W.	Com
2,116,931	Process for the Recovery of Lactose from Whey.	Leviton, A.	USDA
2,118,829	Preparation of Cobalt-Copper Catalysts.	Storch, H. H.	Int
2,121,533	Method of Carrying out Certain Oxidative Fermentation Processes by Bacteria.	Wells, P. A. Lockwood, L. B. Stubbs, J.	USDA
2,123,899	Wood Preservation	King, D. W.	TVA
2,129,222	Process for the Recovery of Soluble Protein Powder from Whey.	Leviton, A.	USDA
2,146,655	Products Obtained from the Hydrogenation of Lignin in the Presence of Suitable Catalysts.	Sherrard, E. C. Harris, E. E.	USDA
2,152,662	Method of Preparing Ribose	Phelps, F. P.	Com
2,186,975	Crystalline Calcium Lactobionate Calcium Bromide and Process for Making the Same.	Isbell, H. S.	Com
2,188,919	Application of Reagents in Counter-Current Extraction.	Proffitt, M. J.	Com
2,191,299	Insecticide	Smith, L. E.	USDA
2,191,300	Insecticide	Smith, L. E.	USDA
2,191,301	Insecticide	Smith, L. E.	USDA
2,197,249	Insecticide	Claborn, H. V. Smith, L. E.	USDA
2,200,564	Insecticide	Schechter, M. S. Haller, H. L.	USDA
2,210,481	Aqueous Dispersion of Hardened Protein.	Brother, G. H. Smith, A. K.	USDA
2,224,243	Insecticide	Bowen, C. V.	USDA
2,234,981	Formaldehyde Sulphoxylate Derivatives of Diphenyl-Sulphides, -Disulphides, -Sulphoxides, and -Sulphones and Methods of Production.	Rosenthal, S. M. Bauer, H.	HEW
2,239,832	Insecticide	Smith, L. E.	USDA
2,261,735	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,262,422	Protein Plastic Molding Compound and Method of Preparing the Same.	Brother, G. H. McKinney, L. L.	USDA
2,265,196	Concealed Marker for Alcohols and Method of Identification Thereof.	Riley, C. H.	Treas
2,269,893	Insecticide	Carter, R. H.	USDA
2,272,044	Insect Repellent	Carter, R. H.	USDA
2,272,047	Insecticide	Freeman, A. F.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,280,085	Sugar from Sorghum Juices	Ventre, E. K. Paine, H. S.	USDA
2,285,059	Process for Preparing Aldehydes	Scanlan, J. T. Swern, D.	USDA
2,290,609	Process for Producing Fatty Acid Polyhydric Esters from Glycerides.	Goss, W. H. Johnstone, H. F.	USDA
2,291,192	Insecticide	Smith, L. E.	USDA
2,291,193	Insecticide	Smith, L. E.	USDA
2,291,194	Insecticide	Smith, L. E.	USDA
2,292,756	Insecticide	Haller, H. L.	USDA
2,304,064	Process for Producing Aldehydes	Scanlan, J. T. Swern, D.	USDA
2,313,504	Sulphydryl Compound Obtained from Flour.	Balls, A. K. Hale, W. S.	USDA
2,318,641	Fermentation Process for the Production of 5-Ketogluconic Acid.	Stubbs, J. J. Lockwood, L. B. Roe, E. T. Ward, G. E.	USDA
2,329,979	Preparation of Tetra-Carboxylic Di-Anhydrides.	Butz, L. W.	USDA
2,331,948	Method for the Purification of Lactic Acid.	Ward, G. E. Tabenkin, B.	USDA
2,338,114	Process for the Preparation of Polyhydroxydibasic Acids and Their Salts.	Isbell, H. S.	Com
2,338,115	Process of Oxidizing Uronic Acids	Isbell, H. S.	Com
2,345,079	Process for the Production of Aconitic Acid.	Ventre, E. K. Henry, H. C. Gayle, F.	USDA
2,349,173	Manufacture of Alicyclic Compounds	Joshel, L. M.	USDA
2,349,232	Manufacture of Alicyclic Compounds	Joshel, L. M.	USDA
2,349,344	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,349,836	Process for the Curing and Preservation of Animal and Fish Products.	Stuart, L.S.	USDA
2,350,435	Derivatives of Ascorbic Acid	Wells, P. A. Swern, D.	USDA
2,351,500	Process for Gluconic Acid Production.	Moyer, A. J.	USDA
2,352,707	Cotton Yarn for Water-Pressure Hose.	Goldthwait, C. F.	USDA
2,354,090	Plywood	Stamm, A. J. Seborg, R. M.	USDA
2,354,192	Insecticide	Bowen, C. V.	USDA
2,354,193	Insecticide	Bowen, C. V.	USDA
2,354,206	Fungicide	Goldsworthy, M. C.	USDA
2,354,940	Fungicide	Carter, R. H. Goldsworthy, M. C.	USDA
2,358,429	Preparation of Pectase	Willaman, J. J. Hills, C. H.	USDA
2,358,430	Method of Preparing Pectinate	Willaman, J. J. Mottern, H. H. Hills, C. H. Baker, G. L.	USDA
2,358,925	Insecticide	Haller, H. L. Barthel, W. F.	USDA
2,359,512	Elastic Impression Compositions	Dickson, G. R. Schoonover, I. C.	Com
2,359,537	Process for the Extraction of Aconitic Acid from Plant Juices.	Ventre, E. K. Ambler, J. A. Byall, S. Henry, H. C.	USDA
2,359,935	Composition of Matter	Nudenberg, W. Butz, L. W.	USDA
2,359,950	Levo-2,3-Butylene Glycol and a Method for Producing the Same.	Ward, G. E. Wickerham, L. J. Pettijohn, O. G. Lockwood, L. B.	USDA
2,362,502	Pyrotechnic Compositions	Schladt, G. J.	Army
2,364,104	Process for Treating Crude Pine Tars	Smith, W. C.	USDA
2,367,798	Allyl and Methallyl Esters of Lactic and Alpha-Acetoxypropionic Acids.	Rehberg, C. E. Fisher, C. H.	USDA
2,368,435	Antioxidant	Wells, P. A. Riemenschneider, R. W.	USDA
2,369,435	Heat Transfer Composition	Coghill, R. D. Milner, R. T.	USDA
2,369,900	Method and Apparatus for Sterilizing Air.	Jennings, B. H. Bigg, E.	Army

Patent No.	Title of Invention	Inventor	Agency
2,372,221	Process of Acetylating 2,3-Butylene Glycol with the Impure Acetic Acid Obtained from the Pyrolytic Decomposition of 2,3-Butylene Glycol Diacetate to Butadiene.	Morell, S. A.	USDA
2,373,015	Process for Producing Polymeric Materials.	Cowan, J. C. Ault, W. C.	USDA
2,373,192	Antioxidants	Lauer, W. M.	USDA
2,373,729	Thickening and Congealing Agent	Willaman, J. J. Wickard, C. R.	USDA
2,374,428	Process for Acylating Esters of Hydroxy Carboxylic Acids.	Fisher, C. H. Fein, M. L.	USDA
2,374,479	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,375,250	Antioxidant Compositions	Riemenschneider, R. W. Turer, J.	USDA
2,375,376	Method of Extracting Pectinous Materials.	Maclay, W. D. Mielsen, J. P.	USDA
2,379,494	Composition of Matter	Orchin, M. Butz, L. W.	USDA
2,379,662	Process for Treating Crude Pine Tar	Smith, W. C.	USDA
2,380,020	Aqueous Dispersions of Hardened or Tanned Protein Salts.	Brother, G. H. Smith, A. K.	USDA
2,380,444	Chemical Process and Products	Isbell, H. S.	Com
2,381,328	Process for the Preparation of Myosmine.	Woodward, C. F. Eisner, A. Haines, P. G.	USDA
2,381,420	Hard Waxes and Fatty Products Derived from Crude Sugarcane Waxes.	Balch, R. T.	USDA
2,383,815	Ternary Synergistic Antioxidant Composition.	Riemenschneider, R. W. Turer, J.	USDA
2,383,816	Alkali Compounds Containing Antioxidant Compositions.	Riemenschneider, R. W. Turer, J.	USDA
2,388,684	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,390,326	Allyl and Substituted Allyl Methacrylates.	Rehberg, C. E. Fisher, C. H.	USDA
2,390,327	Allyl and Substituted Allyl Acrylates	Rehberg, C. E. Fisher, C. H.	USDA
2,391,943	Nonbenzenoid Compounds	Butz, L. W.	USDA
2,392,084	Process for Prevention of Gelation of Solutions or Dispersions of Prolamines.	Evans, C. D. Manley, R. H.	USDA
2,392,455	Insecticide	Bowen, C. V. Smith, L. E.	USDA
2,392,514	Adjunct for Tobacco	Woodward, C. F. Eisner, A. Haines, P. G.	USDA
2,396,434	Acrylic Esters of Glycol Monoethers	Rehberg, C. E. Fisher, C. H.	USDA
2,396,994	Condensation Products of Hydroxy Carboxylic Acids.	Filachione, E. M. Fisher, C. H.	USDA
2,397,689	Thiol Derivatives	Pavlic, A. A. Peppel, W. J.	Army
2,399,595	Process for Manufacturing Acyloxy Carboxylic Acids.	Filachione, E. M. Fisher, C. H.	USDA
2,402,129	Process for Esterifying Acyloxy Carboxylic Acids.	Filachione, E. M.	USDA
2,402,130	Process for the Production of Di-Esters of Hydroxy Carboxylic Acid.	Filachione, E. M. Fisher, C. H.	USDA
2,405,540	Nonbenzenoid Compounds	Butz, L. W.	USDA
2,405,646	Process of Manufacturing Volatile Esters of Hydroxy Carboxylic Acids	Filachione, E. M. Fisher, C. H.	USDA
2,405,973	Preparation of Starch Ethers	Nichols, P. L. Hamilton, R. M.	USDA
2,406,561	Azeotropic Distillation of Methanol from Admixture with Acrylic Esters.	Rehberg, C. E.	USDA
2,408,853	Guayule Rubber by Fermentation	Hoover, S. R. Allen, P. J. Naghski, J.	USDA
2,408,897	Derivatives of Isoascorbic Acid	Wells, P. A. Swern, D.	USDA
2,411,033	Process for the Coagulation of Castilloa Latex.	Ford, T. F.	USDA
2,413,463	Method for Preparing Soluble Allyl Starch.	Vanovsky, E. Nichols, P. L. Meiss, P. E.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,413,889	Production of Acrylic Acid	Rehberg, C. E. Fisher, C. H.	USDA
2,414,118	Synthesis of Fluorene and Its Derivatives.	Orchin, M.	Int
2,414,195	Process for Obtaining Increased Yields in the Extraction of Corn Proteins.	Evans, C. D. Ofelt, C. W.	USDA
2,414,589	Process for Purifying Acrylic Esters	Fein, M. L. Fisher, C. H.	USDA
2,417,995	Acetylation of Lignocellulosic Board Materials.	Stamm, A. J. Tarlow, H.	USDA
2,418,224	Cellulose Acetate Plasticized with an Aryl Morpholidophosphate.	Georges, L. W.	USDA
2,422,455	Methods of Preparing a Diastatic Agent.	Wickerham, L. J.	USDA
2,422,957	1-Bromo-4-(N-Alkylamino)-Hexanes and Process of Making Them.	Elderfield, R. C. Head, J. D.	Army
2,425,550	Process of Making Oriented Regenerated Protein Products.	Lundgren, H. P.	USDA
2,429,679	Composition Containing a Cellulose Compound and a Morpholide.	Georges, L. W.	USDA
2,431,004	Method for Producing Ethyl Alcohol	Wickerham, L. J.	USDA
2,431,969	Fluorination of Perchlorohexatriene	Struve, W. S.	AEC
2,432,223	Process for the Elimination of Magnesium from Insoluble Alkaline Earth Aconitates.	Ambler, J. A. Roberts, E. J.	USDA
2,433,866	Method of Making Furfuryl Acrylate	Rehberg, C. E. Fisher, C. H.	USDA
2,433,905	Method for the Crystallization of Albumin and the Preparation of Protein Products Thereform.	Hughes, W. L.	Army
2,434,412	Recovering Rubber from Guayule Shrub.	Jones, E. P.	USDA
2,434,874	Separation of Starch and Protein in Wheat Grain Products and Extraction of Diastase Thereform.	Tucker, I. W. Balls, A. K.	USDA
2,436,659	Process of Making d-Saccharic Acid	Mehltretter, C. L.	USDA
2,436,699	Nitrogenous Diacyl-Glycerophosphates.	Rose, W. G.	USDA
2,438,278	Method for Azeotropic Distillation of Acetic Anhydride.	Fisher, C. H. Fein, M. L.	USDA
2,438,300	Process for the Purification of Acetic Acid by Azeotropic Distillation.	Schniepp, L. E.	USDA
2,438,988	Plural Section Distillation Column with Top Feed.	Barthel, W. F.	USDA
2,440,349	Process for Preparing an Alkylolamide of a Trihydroxystearic Acid.	Schaeffer, B. B.	USDA
2,440,554	Process for the Recorvery of Rubber in Plants by Fermenting with Clostridium.	Naghski, J. White J. W. Hoover, S. R.	USDA
2,440,781	Insecticidal Fumigant Composition with Solid Rubber Carrier Particles.	Murray, C. W.	USDA
2,442,589	Purification of Perfluoroheptane by Azeotropic Distillation with Methyl Ethyl Ketone.	Hass, H. B. Evans, L. R.	AEC
2,444,266	Pectic Materials and Method of Preparing Same.	Owens, H. S. Maclay, W. D.	USDA
2,445,084	Plasticized Ethyl Cellulose Composition.	Fisher, C. H. Rehberg, C. E. Mast, W. C.	USDA
2,445,085	Plasticized Composition Containing a Cellulose Ether and a Polyacrylic Acid Ester.	Rehberg, C. E. Mast, W. C. Fisher, C. H.	USDA
2,445,911	Process of Acetylating Triethyl Citrate.	Fisher, C. H. Fein, M. L.	USDA
2,447,483	Additives for Silicone Oils	Baker, H. R. Zisman, W. A.	Navy
2,447,693	Process for the Manufacture of Esters of Hydroxy Carboxylic Acids.	Filachione, E. M. Fisher, C. H.	USDA
2,447,715	Esters of Diacyl-Glycerophosphoric Acids.	Rose, W. G.	USDA
2,448,175	Extraction of Rutin	Eskew, R. K.	USDA
2,448,626	Alkylol Amine Salts of Hydroxy Fatty Acids and Process for their Preparation.	Schaeffer, B. B.	USDA
2,448,818	Process of Isolating Low-Methoxyl Pectinic Acids.	Maclay, W. D. McCready, R. M. Owens, H. S.	USDA
2,448,873	Phenoxyethyl Lactate and a Cellulose Compound Plasticized Therewith.	Fein, M. L. Fisher, C. H.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,449,071	A Catalyst for the Synthesis of Hydrocarbons.	Hofer, L. J. Stern, N. R. Hawk, C. O.	Int
2,449,152	Separation of Monoethanol Amine from Admixtures by Azeotropic Distillation with Chlorobenzene.	Speck, J. C.	Navy
2,449,332	S-(Amidomethyl)-Dimercaptopropanols.	Signaigo, F. K.	Army
2,449,612	Synthetic Rubberlike Materials.	Mast, W. C. Rehberg, C. E. Fisher, C. H.	USDA
2,449,816	Plastic Material from Allyl Starch.	Nichols, P. L. Hamilton, R. M.	USDA
2,450,615	Method of Reducing Scald Development on Fruit.	Schomer, H. A.	USDA
2,452,092	Rubberlike Product and Process of Preparation.	Ault, W. C. Schaeffer, B. B.	USDA
2,452,209	Cellulose Ether Plasticized with Bis-(Allyl Lactate) Maleate.	Rehberg, C. E. Fisher, C. H.	USDA
2,453,305	Process for Removing Fats from Rutin Extracts.	Couch, J. F. Krewson, C. F.	USDA
2,454,756	Process for the Polymerization of Furfuryl Acrylate.	Rehberg, C. E. Fisher, C. H	USDA
2,455,427	Process for Impregnating Wood and Composition Therefor.	Loughborough, W. K.	USDA
2,456,295	Coating Compositions.	Mast, W. C.	USDA
2,457,329	Polymers of 9,10-Epoxyoctadecanol and Process for Their Preparation.	Swern, D. Billen, G. N.	USDA
2,457,560	Pectic Enzyme Preparations Fortified with Pectinesterase.	Jansen, E. F. Lineweaver, H.	USDA
2,460,117	Still and Decanter for the Recovery of Products from Alcoholic Solutions of Oleaginous Materials.	Beckel, A. C. Belter, P. A.	USDA
2,460,891	Separation of Proteins from Milk Products.	Leviton, A.	USDA
2,460,980	Process for the Preparation of Isocyanate Derivatives of Proteins.	Fraenkel-Conrat, H. L., Olcott, H. S.	USDA
2,461,070	Process to Produce a Stabilized Protein-Formaldehyde Dispersion.	McKinney, L. L.	USDA
2,463,779	N-Acylated Derivatives of Glutamic Acid and Process for Preparing Them.	Kester, E. B.	USDA
2,464,198	Process for Preparing a Chemical Composition for Water Purification.	Connant, G. H. Morris, J. C.	Army
2,464,199	Alkylamino Alkyl Bromides.	Elderfield, R. C. Brody, F.	Army
2,465,834	Preparation of Lewisite.	Bartlett, P. D. Dauben, H. J. Rosen, L. J.	Army
2,465,888	Butadiene Emulsion Polymerization in the Presence of Levopimaric Acid-Maleic Anhydride Addition Products Esters.	Lawrence, R. V.	USDA
2,465,901	Butadiene Emulsion Polymerization in the Presence of Levopimaric Acid-Maleic Anhydride Addition Product.	Lawrence, R. V. McKennon, F. L.	USDA
2,467,123	Process for the Removal of Hydrogen Halide from Halogenated Compounds.	Fleck, E. E. Haller, H. L.	USDA
2,467,126	Production of Mono-Alkyl Esters of the Addition Product of Levopimaric Acid with Maleic Anhydride.	Graff, M. M.	USDA
2,467,602	2,3-Bis-(Benzamidomethylthio)-Propanol.	Signaigo, F. K.	Army
2,467,798	5,5′-Dihydroxydiamyl Ether.	Alexander, K. Schniepp, L. E.	USDA
2,469,090	Extraction of Aconitic Acid from Sugar Cane.	Ventre, E. K.	USDA
2,473,544	Polyalkyl-Cyclohexanol Acrylates.	Rehberg, C. E. Fisher, C. H.	USDA
2,474,367	Method of Treating Hydrophilic Colloids to Avoid Swelling During Washing.	Ramage, W. D.	USDA
2,478,205	Synthesis of Perylene.	Orchin, M.	Int
2,481,263	Fermentation Process.	Langlykke, A. F. Tsuchiya, H. M. Van Lanen, J. M.	USDA
2,481,557	Separation of Aconitic Acid from Molasses.	Ambler, J. A. Roberts, E. J.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,481,763	Technique for Isolating Subtilin	Alderton, G. Lineweaver, H. Klose, A. A.	USDA
2,483,099	Esters of Polyhydroxy-Benzoic Acids	Morris, S. G. Riemenschneider, R. W.	USDA
2,483,791	Diene Addition Product and Process for Making It.	Teeter, H. M. Scholfield, C. R. Cowan, J. C.	USDA
2,485,507	Chlorinated Hydrocarbon	Perkins, M. A.	AEC
2,491,533	Ethers of 9,10-Dihydroxyoctadecanol	Swern, D.	USDA
2,492,201	Hydroxylation Process	Findley, T. W. Swern, D. Scanlan, J. T.	USDA
2,492,203	Esters of Methacrylic Acid	Treadway, R. H.	USDA
2,494,583	Pyrolysis of C-Acetoxy Aliphatic Amides to Acrylamides.	Ratchford, W. P. Fisher, C. H.	USDA
2,495,756	Process of Neutralizing Pectinic Acids.	Maclay, W. D. Owens, H. S. McCready, R. M.	USDA
2,496,278	Process of Drying Fruit or Vegetable Materials Containing Added Methyl Cellulose.	Eddy, C. W.	USDA
2,496,306	Isolation of Low-Methoxyl Pectins	Owens, H. S. McCready, R. M. Maclay, W. D.	USDA
2,499,833	Method of Making Fluorinated Organic Compounds.	Perkins, M. A.	AEC
2,500,954	Method Involving the Use of Chemicals for Increasing the Drying Rate of Wood.	Loughborough, W. K. Espenas, L. D.	USDA
2,503,077	Perhalogenated Ethylcyclopentane	Stilmar, F. B. Struve, W. S. Lulek, R. N.	AEC
2,503,078	Cyclic Compounds and Method of Making.	Struve, W. S. Stilmar, F. B. Lulek, R. N.	AEC
2,504,983	Process for Making Crystalline 1-Aminomannuronic Amide.	Isbell, H. S. Frush, H. L.	Com
2,504,984	Method for Obtaining Amides of Polyhydroxy Acids Containing a Sugar Group.	Isbell, H. S. Frush, H. L.	Com
2,504,989	Modified Rosin Esters	Lawrence, R. V. Kaufmann, M. W.	USDA
2,505,749	Vegetable Oil Extraction	Deobald, H. J. Beckel, A. C. Belter, P. A.	USDA
2,505,877	Vapor Phase Fluorination Process	Benning, A. F.	AEC
2,506,428	Condensation Product and Process	McBee, E. T. Newcomer, J. S.	AEC
2,507,546	Process for Producing Myrcene from Beta-Pinene.	Savich, T. R. Goldblatt, L. A.	USDA
2,509,513	Synthetic Rubberlike Materials	Mast, W. C. Fisher, C. H.	USDA
2,510,089	Method of Drying Allyl Starch	Dietz, T. J. Hansen, J. E.	USDA
2,510,119	Production of Tannin and Soft-Grit Blasting Material from Nut Shells.	Lathrop, E. C.	USDA
2,510,164	Water-Insoluble Derivatives of Nicotinic Acid and Process for Preparing Them.	Woodward, C. F. Badgett, C. O.	USDA
2,510,864	Catalysts for Fluorination	Cady, G. H.	AEC
2,510,872	Method for Regenerating Antimony Pentafluoride from Spent Antimony Halides Resulting from the Fluorination of Organic Chlorides.	Downing, F. B.	AEC
2,510,945	N-Cyclohexyl Nicotinamide	Badgett, C. O. Woodward, C. F.	USDA
2,512,649	Production of Isononanes	Howard, F. L. Brooks, D. B.	Com
2,514,115	Method of Dissolving Difficultly Soluble Metal Sulfates.	Angerman, A. H.	AEC
2,515,112	Method for Disposing of Corrosive Gases.	Burford, W. B. Anderson, H. C.	AEC
2,517,573	Modification of Wool with Beta-Propiolactone.	Jones, H. W. Lundgren, H. P.	USDA
2,518,345	Chemical Composition	MacDonald, R. N.	Army
2,518,456	Preparation of Acyloxy Carboxylic Acids from Esters of Hydroxy Carboxylic Acids.	Fein, M. L. Fisher, C. H.	USDA
2,519,319	Method of Preparing Chloranil	McBee, E. T. Newcomer, J. S.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,520,123	Polygalacturonide Alkylamides	Carson, J. F	USDA
2,520,127	Method of Purifying Rutin	Porter, W. L Couch, J. F. Naghski, J.	USDA
2,521,121	Dispersion Separation	Kilpatrick, M	AEC
2,521,626	Process for Fluorinating Hydrocarbons.	Benning, A. F	AEC
2,522,547	Isolation of Usnic Acid	Stark, J. B Walter, E. D.	USDA
2,523,309	Preparation of Diglycerides	Kester, E. B	USDA
2,524,037	Process for the Uninterrupted Recirculation of Unrefined Alcoholic Fatty Oil Solvent.	Beckel, A. C Cowan, J. C. Belter, P. A.	USDA
2,524,739	Process for the Production of Ceramic Articles.	Stone, R. L	Com
2,524,792	Process for Solubilizing Allyl Starch	Hamilton, R. M Yanovsky, E.	USDA
2,525,107	Coating Composition for Metals	Whiting, L. R Wangner, P. F.	Navy
2,525,786	Polyhydric Alcohol Esters of Acyloxycarboxylic Acids.	Filachione, E. M Fein, M. L. Fisher, C. H.	USDA
2,526,680	Salts of Phosvitin from Egg Yolk and Method for Producing the Same.	Mecham, D. K	USDA
2,531,383	Stabilization of Viscous Dispersions of Cottonseed Proteins.	Arthur, J. C	USDA
2,533,240	Organochlorosilanes and Process for Their Production.	Goldblatt, L. A Oldroyd, D. M.	USDA
2,534,255	Hydroxy Polyesters	Filachione, E. M Fein, M. L. Fisher, C. H.	USDA
2,534,259	Recovery of Alcohol from a Ternary Solution.	Gee, E. A Bossche, J. V.	Int
2,536,482	Stabilized Vesicant Agent	Wood, W. H	Army
2,537,777	Chlorofluoroheptanes	McBee, E. T	AEC
2,537,983	Electrical Insulating and Potting Composition.	Franklin, P. J	Army
2,539,388	Preparation of Aminoindane Compounds.	Allen, M. J	HEW
2,539,428	3,3'-Dithiolisobutyric Acid	Jansen, E. F	USDA
2,539,472	Process for the Purification of Certain Water-Soluble Hydroxycarboxylic Acids.	Ratchford, W. P Fisher, C. H.	USDA
2,539,473	Preparation of N,N-Diethyllactamide.	Ratchford, W. P Fisher, C. H.	USDA
2,543,511	Preparation of Diborane	Schlesinger, H. I Brown, H. C.	AEC
2,544,472	Preparation of Boron Compound	Schlesinger, H. I Brown, H. C.	AEC
2,546,903	Process of Producing Activated Carbon.	Morrell, J. C	Army
2,550,705	Method for Obtaining Pectinic Acids of Low Methyl Ester Content in Concentrated Form.	Maclay, W. D Shepherd, A. D. McCready, R. M. Graham, R. P.	USDA
2,553,564	Esters of Hydracrylic Acid and Imino Ethers.	Fein, M. L Fisher, C. H.	USDA
2,554,316	Production of Radioactive Halogens	Reid, A. F	AEC
2,554,476	Radioactive Product and Method of Producing the Same.	Werner, L. B	AEC
2,555,364	Subtilin-Pectin Derivatives	Owens, H. S Maclay, W. D.	USDA
2,555,512	Preparation of Diborane	Schlesinger, H. I Brown, H. C.	AEC
2,557,948	Process for the Regeneration of Bone Char.	Deitz, V. R	Com
2,559,607	Production of Furfural from Pentose Liquors.	Lathrop, E. C Dunning, J. W. Frye, C. F.	USDA
2,559,625	Isolation of an Organic Sulfur Compound from Asparagus.	Jansen, E. F	USDA
2,559,626	Dithiane Caboxylic Acids	Jansen, E. F	USDA
2,559,650	Preparation of D-Tartaric Acid	Lockwood, L. B Nelson, G. E.	USDA
2,559,652	Preparation of D-Glucuronic Acid	Mehltretter, C. L	USDA
2,562,198	N-Beta-Propionic Acid Derivatives of Alpha-A nino Acids.	McKinney, L. L Uhing, E. H. Setzkorn, E. A. Cowan, J. C.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,562,200	Process for Making D-Glucuronic Acid and Its Salts.	Mehltretter, C. L.	USDA
2,562,965	Emulsion Polymerization of Long-Chain Vinyl Esters.	Port, W. S. Swern, D. Jordon, E. F.	USDA
2,563,806	Preparation of Substituted Bisaminophenyl Ethylene Glycols.	Allen, M. J.	HEW
2,564,024	Method of Making Halocarbon Polymers.	Miller, W. T.	AEC
2,565,487	Production of Esters	Filachione, E. M. Fisher, C. H.	USDA
2,566,357	Synthesis of Di-Aryl Cyclic Esthers	Orchin, M. Woolfolk, E. O.	Int
2,567,237	Amides of 9,10-Epoxystearic Acid	Scanlan, J. T. Swern, D. Roe, E. T.	USDA
2,567,250	Aluminum Resinates and Method of Preparation.	St. Clair, W. E. Lawrence, R. V.	USDA
2,567,930	Preparation of Epoxy Compounds by Oxidation of Cis-Monoolefine Compounds.	Findley, T. W. Swern, D.	USDA
2,567,980	Drying Wet Wheat Gluten	Tuomy, J. M. Slotter, R. L.	USDA
2,569,300	Selective Oxidation of Steroid Alcohols.	Fieser, L. F. Rajagopalan, S.	HEW
2,569,502	Epoxidized Oils	Swern, D. Findley, T. W.	USDA
2,571,926	Preparation of Organic Materials	Murray, A. Ronzio, A. R.	AEC
2,572,026	Separation of Alpha-Casein from Whole Casein.	Hipp, N. J. Groves, M. L. McKeekin, T. L.	USDA
2,572,046	Process for Recovering Parthenyl Cinnamate and Essential Oils from Guayule Resin.	Meeks, J. W. Banigan, T. F. Planck, R. W.	USDA
2,572,892	Oxidation of Oleic Acid	Swern, D. Knight, H. B.	USDA
2,573,701	Polyethylene Glycol Esters of Acyloxycarboxylic Acids.	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,575,352	Phosphates of Amylaceous Polysaccharides.	Lohmar, R. J.	USDA
2,578,259	Copolymerization Process and Product.	McMillan, E. B.	Navy
2,578,684	Glycol Esters of Acyloxycarboxylic Acids.	Fisher, C. H. Filachione, E. M. Fein, M. L.	USDA
2,580,358	Method for Storing Perhaloacetyl Peroxide and Stabilized Perhaloacetyl Peroxide.	Reed, S. K. Miller, W. T. Dittman, A. L.	AEC
2,580,373	Process for Preparing Perhaloacetyl Peroxide.	Zimmerman, C.	AEC
2,580,491	Reducing the Crystallinity of Native Fibrous Cellulosic Material.	Ward, K. Conrad, C. M. Segal, L.	USDA
2,581,398	Method for the Separation of a-Methyl Naphthalene from B-Methyl Naphthalene by Azeotropic Distillation.	Feldman, J. Orchin, M.	Int
2,581,406	Separation of Individual Phenols from a Mixture of Isomeric, Homologous, or other Closely Related Phenols.	Golumic, C. Orchin, M.	Int
2,582,239	Water Repellent Treatment of Textiles with Long Chain Substituted Phenol Aldehyde Resin Emulsion.	Dodd, C. G.	Army
2,583,549	Preparation of Pentaerythrityl Phosphates.	Daul, G. C. Reid, J. B.	USDA
2,583,554	Method for the Separation of a-Methyl Naphthalene from B-Methyl Naphthalene by Azeotropic Distillation.	Feldman, J. Orchin, M.	Int
2,583,574	Acrolein and Sulfur Halide Process to Strengthen Protein Fibers.	Thorsen, W. J. Lundgren, H. P. Jones, H. W.	USDA
2,584,970	Reduction of Oxydivaleronitrile	Alexander, K. Schniepp, L. E.	USDA
2,584,972	Method for Preventing Deterioration of Seeds.	Altschul, A. M. Condon, M. Z. Lambou, M. G.	USDA
2,584,998	Mixed Glycerol Esters and Their Acylation Products.	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,586,550	Halogen-Substituted Acetyl Peroxide Catalyst for Halo-Olefin Polymerization.	Miller, W. T. Dittman, A. L. Reed, S. K.	AEC

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Patent No.	Title of Invention	Inventor	Agency
2,586,860	Separation of Vinyl Esters of Long Chain Fatty Acids from the Corresponding Free Fatty Acids.	Port, W. S. Jordan, E. F. Swern, D.	USDA
2,587,600	Purification of Rutin	Couch, J. F. Krewson, C. F.	USDA
2,587,623	Acylation of Dextran in Formamide	Jeanes, A. R. Wilham, C. A	USDA
2,588,398	Preparation of Granular Polymers	Mast, W. C. Fisher, C. H.	USDA
2,588,449	Levulose Dihydrate	Young, F. E. Jones, F. T.	USDA
2,589,226	Acylation of Polysaccharides in Formamide.	Carson, J. F.	USDA
2,589,314	Preparation of Keto Acid Compounds.	Woods, L. C. Teeter, H. M.	USDA
2,590,426	Processes for Photochemical Chlorination of Hydrocarbons.	Loverde, A.	AEC
2,590,852	Esters of Acylated Lactic Acid	Fein, M. L. Fisher, C. H.	USDA
2,591,020	Allylated Trimethylene Trisulfones	Smith, A. E.	Navy
2,592,544	Pentaerythrityl Phosphoric Acid Esters of Cellulose and Processes of Making the Same.	Daul, G. C. Reid, J. D.	USDA
2,594,283	Process for the Preparation of Inoculum for Use in the Fermentative Production of Sodium Gluconate.	Moyer, A. J. Blom, R. H. Sohns, V. E.	USDA
2,594,291	Process for the Production of High Purity Tanning Extracts.	Cordon, T. C. Wickerham, L. J.	USDA
2,594,294	Stabilization of Glyceride Oils with Iminodisuccinic Acid.	Cowan, J. C. Evans, C. D.	USDA
2,596,047	Uranium-Aroyl Aldehyde Complexes and Method of Making Same.	Schlesinger, H. I. Brown, H. C.	AEC
2,596,084	Fluorinated Compounds and Process of Producing Same.	Weimer, P. E.	AEC
2,599,549	Production of Alpha-Carbalkoxyalkyl Methacrylates.	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,602,768	Process for the Manufacture of Sodium Gluconate.	Crocker, C. K. Moyer, A. J. Pfiefer, V. F.	USDA
2,602,789	Ether-Esters of Polyhydroxy Compounds.	Schwartz, J. H. Talley, E. A. Zief, M. Fisher, C. H.	USDA
2,606,142	Hydrogenation Liquefaction of Coal Employing Zinc Catalysts.	Storch, H. H. Pelipetz, M. G.	Int
2,606,881	Polymerization of Polyallyl and Polymethallyl Ethers of Polyhydroxy Compounds.	Zief, M. Yanovsky, E.	USDA
2,607,797	N,2-Carboalkoxyethyl Derivatives of Alpha-Amino Acids and of Acylated Alpha-Amino Acids.	McKenney, L. L. Uhing, E. H. Setzkorn, E. A. Cowan, J. C.	USDA
2,608,562	Method of Producing Amides	Roe, E. T. Swern, D.	USDA
2,608,593	Fluorination Process	Fowler, R. D. Anderson, H. C.	AEC
2,610,113	Moisture Control of Solidified Fuel	Fischer, K. A. Hecht, O. F.	Army
2,610,114	Solidification of Liquid Fuel	Fischer, K. A. Hecht, O. F.	Army
2,610,196	Esters of Acylated Hydroxycarboxylic Acids.	Fisher, C. H. Fein, M. L.	USDA
2,610,972	Synthesis of Organic Peroxides	Campbell, T. W. Coppinger, G. M.	USDA
2,611,748	Chemical Indicator for Alkyl-Chloroarsines.	Wilzbach, K. E.	Army
2,614,107	Process for the Reduction of Carbonyl Compounds.	Wender, I. Orchin, M.	Int
2,614,121	Process for Making Intermediates for Producing Basic Compounds.	Price, C. C. Roberts, R. M.	Army
2,616,854	Hydraulic Fluid	Fenske, M. R.	Navy
2,617,816	Catalytic Conversion of Carbon Monoxide and Hydrogen to Hydrocarbons and Oxygenated Organic Compounds.	Crowell, J. H. Bension, H. E.	Int
2,618,570	Process for Preparing a Grouting Fluid.	Blackburn, W. C.	Int
2,623,864	Polymerization of Allylic Ethers	Wrigley, A. N. Yanovsky, E. Nichols, P. L.	USDA

SUBGROUP 28–31—Biological products

The following patents relate to establishments engaged in the production of viruses, serums, toxins, and analogous products such as allergenic extracts, and normal serums and plasmas for human or veterinary use. Bacteriological media are also included in this subgroup.

Patent No.	Title of Invention	Inventor	Agency
2,102,235	Vaccines and Processes for Manufacturing Vaccines.	Dorset, M.	USDA
2,121,533	Method of Carrying out Certain Oxidative Fermentation Processes by Bacteria.	Wells, P. A. Lockwood, L. B. Stubbs, J.	USDA
2,132,712	Fermentation Process for the Manufacture of Dextro-Lactic Acid.	Ward, G. E. Lockwood, L. B. May, O. E.	USDA
2,162,721	Production of D-Ribose from Calcium D-Altronate.	Hudson, C. S. Richtmyer, N. K.	HEW
2,207,738	Production of D-Altronic Acid and Its Salts from Sedoheptulose.	Hann, R. M. Hudson, C. S. Richtmyer, N. K.	HEW
2,234,981	Formaldehyde Sulphoxylate Derivatives of Diphenyl-Sulphides, -Disulphides, -Sulphoxides, and -Sulphones, and Methods of Production.	Rosenthal, S. M. Bauer, H.	HEW
2,277,716	Fermentation Process for the Production of 2-Ketogluconic Acid.	Lockwood, L. B. Ward, G. E. Stubbs, J. J. Roe, E. T. Tabenkin, B.	USDA
2,293,890	Process for Propagating Bacteria	Dutky, S. R.	USDA
2,318,641	Fermentation Process for the Production of 5-Ketogluconic Acid.	Stubbs, J. J. Lockwood, L. B. Roe, E. T. Ward, G. E.	USDA
2,329,979	Preparation of Tetra-Carboxylic Di-Anhydrides.	Butz, L. W.	USDA
2,351,500	Process for Gluconic Acid Production.	Moyer, A. J.	USDA
2,354,393	Process for Extracting Prolamines	Manley, R. H. Evans, C. D.	USDA
2,359,950	Levo-2,3-Butylene Glycol and a Method for Producing the Same.	Ward, G. E. Wickerham, L. J. Pettijohn, O. G. Lockwood, L. B.	USDA
2,366,952	Proteinous Material	Balls, A. K. Hale, W. S. Harris, T. H	USDA
2,369,267	Method of Preparing Hog Cholera Vaccine.	Tilley, F. W.	USDA
2,370,662	Method of Producing Biotin Inactivating Material.	Hertz, R. Sebrell, W. H.	HEW
2,391,943	Nonbenzenoid Compounds	Butz, L. W.	USDA
2,397,656	Derivatives of the Cyclopentanoperhydrophenanthrene Series and Process of Making Same.	Gallaher, T. F. Long, W. P.	Army
2,399,840	Method for the Isolation of Penicillin from Aqueous Solutions.	Wachtel, J. L.	USDA
2,423,475	Internal Surgical Dressing	Bice, C. W. MacMasters, M. M.	USDA
2,423,873	Method for Production of Increased Yields of Penicillin.	Coghill, R. D. Moyer, A. J.	USDA
2,424,003	Method for the Production of Riboflavin by Candida Flareri.	Tanner, F. W. Van Lanen, J. M.	USDA
2,424,184	Tertiary Amino Pentanols and Esters Thereof.	Morell, S. A.	USDA
2,432,638	Method for the Isolation of Penicillin	Wachtel, J. L.	USDA
2,432,642	Catalytic Vapor Phase Oxidation of Nicotine to 3,2′-Nicotyrine.	Woodward, C. F. Badgett, C. O. Haines, P. G.	USDA
2,433,905	Method for the Crystallization of Albumin and the Preparation of Protein Products Therefrom.	Hughes, W. L.	Army
2,434,715	Glutamic Acid-Free Protein Hydrolysate and the Production Thereof.	Olcott, H. S. Lewis, J. C.	USDA
2,436,145	Nephelometer for Assaying Penicillin	Johnson, F. H.	Army
2,437,060	Process of Recovering Gamma Globulins from Human Blood Serum.	Williams, J. W. Deutsch, H. F.	Army
2,438,209	Reaction Product of Gramicidin and Formaldehyde and Method of Production.	Fraenkel-Conrat, H. L. Humfeld, H. Lewis, J. C. Dimick, K. P. Olcott, H. S.	USDA
2,441,730	Method and Means for Preservation of Blood Plasma and the Like By Freezing and Drying.	Strumia, M. M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,442,141	Method for Production of Penicillin	Moyer, A. J	USDA
2,442,452	Method of Isolating Lysozyme from Its Naturally Occurring Mixtures with Other Biologic Components.	Alderton, G Fevold, H. L.	USDA
2,443,989	Method for Production of Penicillin	Moyer, A. J	USDA
2,445,128	Biological Process for the Production of Riboflavin.	Van Lanen, J. M Tanner, F. W. Wickerham, L. J.	USDA
2,445,356	Thiol Derivatives	Kharasch, M. S Weinhouse, S.	Army
2,449,340	Vitamin-B Complex Concentrate	Tanner, F. W Van Lanen, J. M.	USDA
2,453,534	Process for Isolation of Gramicidin	Olcott, H. S Fraenkel-Conrat, H. L.	USDA
2,459,139	Process for Extraction and Purification of Subtilin.	Lightbody, H. D Lewis, J. C. Fevold, H. L. Dimick, K. P. Alderton, G.	USDA
2,463,784	Method of Preparing Pentonic Acids from Pentoses.	Lockwood, L. B	USDA
2,464,197	Bacteriostatic and Antibiotic Compound and Method of Preventing Bacterial Growths.	Clarke, H. T	Army
2,474,339	Keratin Derivatives and Process of Preparation Thereof.	Ward, W. H Binkley, C. H.	USDA
2,476,085	Purification of Subtilin	Dimick, K. P Fevold, H. L. Stubbs, J. J. Garibaldi, J. A. Lightbody, H. D.	USDA
2,476,107	Method for Production of Penicillin	Moyer, A. J	USDA
2,479,751	Isolation of Polygalacturonase	Lineweaver, H Jang, R. Jansen, E. F.	USDA
2,481,263	Fermentation Process	Langlykke, A. F Tsuchiya, H. M. Van Lanen, J. M.	USDA
2,481,763	Technique for Isolating Subtilin	Alderton, G Lineweaver, H. Klose, A. A.	USDA
2,483,099	Esters of Polyhydroxy-Benzoic Acids	Morris, S. G Riemenschneider, R. W.	USDA
2,491,537	Liquid Injectable Oil-Pectin-Drug Therapeutic Compositions.	Welch, H	HEW
2,492,458	Fibrin Foam	Bering, E. A	Navy
2,495,743	Alcohol Derivatives of Subtilin	Lewis, J. C Jansen, E. F.	USDA
2,496,297	Process of Culturing Bacteria	Lockwood, L. B Stodola, F. H.	USDA
2,498,165	Process for Producing Bacitracin	Johnson, B. A Meleney, F. L.	Army
2,498,665	Preparation of Peptides	Emerson, O. H	USDA
2,504,847	Process for Obtaining Febrifugine Alkaloids.	Mead, J. F Brockman, J. A. Koepfli, J. B.	Army
2,508,378	Method of Preparing Subtilin	Feeney, R. E Garibaldi, J. A.	USDA
2,518,345	Chemical Composition	MacDonald, R. N.	Army
2,518,510	Stable Injectable Oil Pectin Therapeutic Compositions.	Welch, H	HEW
2,520,076	Process for Separating and Recovering Globulins from Blood Plasmas.	Williams, J. W Deutsch, H. F.	Army
2,520,908	Methyl Esters of Subtilin	Carson, J. F Lewis, J. C.	USDA
2,524,089	Process of Producing Subtilin	Stubbs, J. J Feeney, R. E. Garibaldi, J. A. Feustel, I. C.	USDA
2,533,004	Fibrin Clots and Methods for Preparing the Same.	Ferry, J. D Morrison, P. R.	Army
2,557,078	Enzyme Production	Corman, J	USDA
2,562,934	Process of Isolating Lupulon from Hop Resin.	Jansen, E. F Michener, H. D. Snell, N.	USDA
2,566,357	Snythesis of Di-Aryl Cyclic Ethers	Orchin, M Woolfolk, E. O.	Int
2,571,104	Polymyxin Production	Benedict R. G	USDA

Patent No.	Title of Invention	Inventor	Agency
2,572,897	Process of Production of Aureotracin, a Compound of Aureomycin and Bacitracin.	Welch, H.	HEW
2,579,455	Crystallization of Lysozyme from Egg White.	Alderton, G. Fevold, H. L.	USDA
2,594,283	Process for the Preparation of Inoculum for use in the Fermentative Production of Sodium Gluconate.	Moyer, A. J. Blom, R. H. Sohns, V. E.	USDA
2,594,374	Streptomycin-Polymyxin-Bacitracin Composition.	Welch, H.	HEW
2,602,768	Process for the Manufacture of Sodium Gluconate.	Crocker, C. K. Moyer, A. J. Pfeifer, V. F.	USDA
2,603,583	Pectin Penicillin Preparation	Welch, H.	HEW
2,616,828	Method of Enzymatic Resolution of Amino Acids.	Levintow, L. Greenstein, J. P.	HEW
2,617,755	Antibiotic Production from Streptomyces Griseo-Carneus.	Benedict, R. G. Stodola, F. H.	USDA

SUBGROUP 28–32—Botanical products

The following patents relate to establishments engaged in grading, grinding, and milling botanical drugs, herbs, and agar-agar.

Patent No.	Title of Invention	Inventor	Agency
2,257,218	Process for the Preparation of Papain.	Balls, A. K. Lineweaver, H. Schwimmer, S.	USDA
2,425,094	Process for Obtaining Rutin from Buckwheat.	Griffin, E. L.	USDA
2,453,305	Process for Removing Fats from Rutin Extracts.	Couch, J. F. Krewson, C. F.	USDA
2,500,930	Process for Refining Rutin	Couch, J. F. Krewson, C. F. Porter, W. L.	USDA
2,508,378	Method of Preparing Subtilin	Feeney, R. E. Garibaldi, J. A.	USDA
2,520,127	Method of Purifying Rutin	Porter, W. L. Couch, J. F. Naghski, J.	USDA
2,552,547	Isolation of Usnic Acid	Stark, J. B. Walter, E. D.	USDA
2,527,602	Process of Separating Carotene Fractions and Tocopherol-Sterol Fractions from Green Plant Materials.	Wall, M. E.	USDA
2,534,250	Process of Isolating Quercitrin	De Eds, F. Booth, A. N.	USDA
2,534,275	Method of Refining Rutin	Krewson, C. F. Naghski, J. Porter, W. L.	USDA
2,543,049	Protoplasts from Plant Leaves and Stems.	Hoover, S. R. Naghski, J. White, J. W.	USDA
2,571,104	Polymyxin Production	Benedict, R. G.	USDA

SUBGROUP 28–33—Inorganic and organic medicinal chemicals

The following patents relate to establishments engaged in manufacturing bulk organic and inorganic medicinal chemicals and their derivatives. Patents regarding establishments engaged in manufacturing endocrine products, manufacturing or isolating basic vitamins, and isolating active medicinal principles such as alkaloids from botanical drugs and herbs are also included in this subgroup.

Patent No.	Title of Invention	Inventor	Agency
2,062,324	Method of Extraction of Morphine and Related Derivatives.	Mallory, G. E.	Treas
2,085,794	Urinary Antiseptic	De Eds, F. Thomas, J. O. Eddy, C. W.	USDA
2,162,686	Method for the Preparation of Thionol.	De Eds, F. Eddy, C. W. Thomas, J. O.	USDA
2,178,010	Nuclear Substituted Derivatives of the Morphine Series and Methods for their Preparation.	Small, L. F. Fitch, H. M.	HEW
2,191,455	Extracting Oil	Davis, A. L. Bartlett, L. H.	TVA
2,234,981	Formaldehyde Sulphoxylate Derivatives of Diphenyl-Sulphides, -Disulphides, -Sulphoxides, and -Sulphones, and Methods of Production.	Rosenthal, S. M. Bauer, H.	HEW

Patent No.	Title of Invention	Inventor	Agency
2,285,059	Process for Preparing Aldehydes	Scanlan, J. T. Swern, D.	USDA
2,303,765	Preparation of Ammonium Allantoinate.	Robinson, W.	USDA
2,304,064	Process for Producing Aldehydes	Scanlan, J. T. Swern, D.	USDA
2,307,078	Process for Refining Oleoresin	Reed, J. O.	USDA
2,329,979	Preparation of Tetra-Carboxylic Di-Anhydrides.	Butz, L. W.	USDA
2,331,948	Method for the Purification of Lactic Acid.	Ward, G. E. Tabenkin, B.	USDA
2,359,935	Composition of Matter	Butz, L. W. Nudenberg, W.	USDA
2,370,662	Method of Producing Biotin Inactivating Material	Hertz, R. Sebrell, W. H.	HEW
2,387,830	Nonbenzenoid Fused Polycyclic Compounds.	Butz, L. W.	USDA
2,394,278	Process for Purification of Carotene	Wall, M. E. Kelley, E. G.	USDA
2,397,920	Stabilization of Oils and Fats	Coe, M. R., Jr. Coe, M. R., Sr.	USDA
2,399,597	Anthelminthic	Jones, W. R. Jones, H. A.	USDA
2,399,840	Method for the Isolation of Penicillin from Aqueous Solutions.	Wachtel, J. L.	USDA
2,413,055	Process for the Preparation of Riboflavin Concentrates.	Leviton, A.	USDA
2,422,957	1-Bromo-4-(N-Alkylamino) Hexanes and Process of Making Them.	Elderfield, R. C. Head, J. D.	Army
2,423,873	Method for Production of Increased Yields of Penicillin.	Coghill, R. D. Moyer, A. J.	USDA
2,424,003	Method for the Production of Riboflavin by Candida Flareri.	Tanner, F. W. Van Lanen, J. M.	USDA
2,425,094	Process for Obtaining Rutin from Buckwheat.	Griffin, E. L.	USDA
2,432,638	Method for the Isolation of Penicillin	Wachtel, J. L.	USDA
2,437,766	Method of Culturing Fungi	Stevenson, E. C. Mitchell, J. W.	USDA
2,442,141	Method for Production of Penicillin	Moyer, A. J.	USDA
2,443,919	Fermentation Process for Production of Alpha Ketoglutaric Acid.	Lockwood, L. B. Stodola, F. H.	USDA
2,443,989	Method for Production of Penicillin	Moyer, A. J.	USDA
2,445,128	Biological Process for the Production of Riboflavin.	Tanner, F. W. Van Lanen, J. M Wickerham, L. J.	USDA
2,445,366	Ophthalmic Compositions	Rigby, G. W.	Army
2,445,748	Production of Penicillin	Demerec, M.	Com
2,446,116	Process of Purifying Carotene Contaminated with Chlorophyll and Xanthophyll.	Wall, M. E. Kelley, E. G.	USDA
2,449,332	S-(Amidomethyl)-Dimercaptopropanols.	Signaigo, F. K.	Army
2,449,340	Vitamin-B Complex Concentrate	Tanner, F. W. Van Lanen, J. M.	USDA
2,453,496	Process of Converting Nicotinonitrile into Nicotinamide.	Couch, J. F. Krewson, C. F.	USDA
2,459,696	Process for the Preparation of Nornicotine.	Haines, P. G. Eisner, A. Woodward, C. F.	USDA
2,460,891	Separation of Proteins from Milk Products.	Leviton, A.	USDA
2,463,666	Nicotinium Salts and their Production.	Woodward, C. F. Weil, L.	USDA
2,464,199	Alkylamino Alkyl Bromides	Elderfield, R. C. Brody, F.	Army
2,466,788	Fungicidal Nicotinium Salt Compositions.	Woodward, C. F. Howard, F. L. Keil, H. L. Weil, L.	USDA
2,467,602	2,3-Bis-(Benzamidomethylthio)-Propanol.	Signaigo, F. K.	Army
2,476,107	Method for Production of Penicillin	Moyer, A. J.	USDA
2,476,514	Double Salts of Nicotine	Smith, C. R.	USDA
2,477,479	Antimalarials and Process of Making Them.	Elderfield, R. C. Head, J. D.	Army
2,477,480	Antimalarial Compounds and Process of Making Them.	Elderfield, R. C. Head, J. D.	Army

Patent No.	Title of Invention	Inventor	Agency
2,477,812	Microbiological Production of Riboflavin.	Leviton, A.	USDA
2,478,168	Process for Obtaining Rutin from Buckwheat.	Eskew, R. K.	USDA
2,478,473	Process of Recovering Nicotine from Nicotine-Bearing Plant Material.	Eskew, R. K.	USDA
2,485,162	7-Chloro-4-(1-Ethyl-4-Piperidylamino)-Quinoline.	Parham, B. G.	Army
2,485,174	Basic Side Chain Substituted Quinoline Derivative.	Tarbell, D. S. Shakespeare, N. Bunnett, J. F.	Army
2,488,274	6-Methoxy-8-(5-Isopropyl Amino Pentylamino) Quinoline Compounds and Quinine as Antimalarials.	Drake, N. L. Van Hook, J. O.	Army
2 491,537	Liquid Injectable Oil-Pectin-Drug Therapeutic Compositions.	Welch, H.	HEW
2,492,467	Quinoline Compounds having Antimalarial Properties.	Drake, N. L. Van Hook, J. O.	Army
2,492,487	Quinoline Derivatives having Antimalarial Properties.	Koepfli, J. B. Buchman, E. R.	Army
2,494,801	Method for Production of 7-Chloro-4-Aminoquinolines.	Fisher, W. A.	Army
2,494,851	Method for Producing 5,6,Dimethoxy-8-Nitroquinoline.	Williamson, T. A.	Army
2,496,261	Preparation of Beta-Amylase from Sweet Potatoes.	Balls, A. K. Walden, M. K. Thompson, R. R.	USDA
2,498,174	Aluminum Hexacarbamide Periodide as Water Disinfectant.	Morris, J. C.	Army
2,498,665	Preparation of Peptides	Emerson, O. H.	USDA
2,502,264	Quinoline Derivatives having Antimalarial Properties.	Lutz, R. E. Koepfli, J. B. Buchman, E. R.	Army
2,502,472	Electrolytic Preparation of Calcium D-Arabonate.	Mehltretter, C. L. Dvonch, W.	USDA
2,504,847	Process for Obtaining Febrifugine Alkaloids.	Mead, J. F. Brockman, J. A. Koepfli, J. B.	Army
2,504,875	Method for Producing 4-Hydroxy Quinolines.	Price, C. C. Roberts, R. M. Herbrandson, H. F.	Army
2,504,895	Method for Preparation of Intermediate Compounds Suitable for Conversion into Nuclear Substituted Heterocyclic Compounds.	Snyder, H. R. Jones, R. E.	Army
2,504,896	Method of Preparing Intermediates Suitable for Conversion into Nuclear Substituted Heterocyclic Compounds.	Snyder, H. R. Jones, R. E.	Army
2,508,378	Method of Preparing Subtilin	Feeney, R. E. Garibaldi, J. A.	USDA
2,508,937	4-Methyl-8-(Dialkyl Aminoalkylamino) Quinolines and Method for Their Production.	Campbell, K. N.	Army
2,510,164	Water-Insoluble Derivatives of Nicotinic Acid and Process for Preparing Them.	Woodward, C. F. Badgett, C. O.	USDA
2,510,945	N-Cyclohexyl Nicotinamide	Badgett, C. O. Woodward, C. F.	USDA
2,512,551	Method for the Recovery of 7-Substituted-4-Hydroxyquinolines.	Price, C. C. Reitsema, R. H.	Army
2,516,120	Oxidative Method of Producing 7-Hydroxyphenothiazone-3.	Houston, D. F.	USDA
2,517,585	N-(2-Cyanoethyl)-2-Pyrrolidone-5-Carboxylic Acid and Methods for Its Preparation.	Uhing, E. H. Cowan, J. C. McKinney, L. L.	USDA
2,518,510	Stable Injectable Oil-Pectin Therapeutic Compositions.	Welch, H.	HEW
2,520,041	Process for Producing 2-Carboxyquinoline Compounds.	Lisk, G. F. Stacy, G. W.	Army
2,520,042	Process for Producing 4-Hydroxy-2-Carboxy Quinoline Compounds.	Lisk, G. F. Stacy, G. W.	Army
2,520,043	Process for Preparing 4,7-Dichloro-8-Methylquinoline.	Lisk, G. F. Stacy, G. W.	Army
2,527,602	Process of Separating Carotene Fractions and Tocopherol-Sterol Fractions from Green Plant Materials.	Wall, M. E.	USDA
2,543,083	Recovery of Carotene Concentrate	Weil, L. White, J. W. Naghski, J.	USDA
2,559,624	Preparation of 7-Hydroxyphenothiazone-3.	Houston, D. F. Kester, E. B.	USDA
2,561,364	Method for Producing Vitamin B_{12}	Hall, H. H. Tsuchiya, H. M.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,563,806	Preparation of Substituted Bisaminophenyl Ethylene Glycols.	Allen, M. J.	HEW
2,571,115	Isolation of Bacterial Mutants	Davis, B. D.	HEW
2,576,932	Fermentation Process for Production of Vitamin B_{12}.	Lewis, J. C. Garibaldi, J. A. Ijichi, K. McGinnis, J.	USDA
2,577,900	Process for Producing Anils	Lisk, G. F. Stacy, G. W.	Army
2,578,738	Biological Production of Riboflavin	Pridham, T. G.	USDA
2,594,294	Stabilization of Glyceride Oils with Iminodisuccinic Acid.	Cowan, J. C. Evans, C. D.	USDA
2,601,350	Hydrolysis of Beta Lactam Linkage by Penicillinase.	Welch, H.	HEW
2,603,583	Pectin Penicillin Preparation	Welch, H.	HEW
2,604,474	Process for the Preparation and Manufacture of 6-Methoxy-8-(4-Amino-1-Methylbutylamino)-Quinoline.	Elderfield, R. C. Werble, E.	HEW
2,605,186	Stabilization of Glyceride Oils with Acetone Dicarboxylic Acid.	Schwab, A. W. Moser, H. A. Evans, C. D.	USDA
2,605,280	p-Aminobenzenephosphonous Acid	Klotz, I. M. Morrison, R. T.	Navy

SUBGROUP 28–34—Pharmaceutical preparations

The following patents relate to establishments engaged in fabricating drugs and medicines in pharmaceutical preparations such as ampuls, tablets, capsules, ointments, solutions, and suspensions, for human and veterinary use, including vitamin preparations and galenicals such as fluid extracts and tinctures.

Patent No.	Title of Invention	Inventor	Agency
2,085,794	Urinary Antiseptic	De Eds, F. Thomas, J. O. Eddy, C. W.	USDA
2,162,686	Method for the Preparation of Thionol.	De Eds, F. Eddy, C. W. Thomas, J. O.	USDA
2,178,010	Nuclear Substituted Derivatives of the Morphine Series and Methods for their Preparation.	Small, L. F. Fitch, H. M.	HEW
2,280,856	Benzene Sulphonamidyl Compounds of Sulphanilamide, Salts and Derivatives Thereof, and Methods of Production.	Rosenthal, S. M. Bauer, H.	HEW
2,303,765	Preparation of Ammonium Allantoinate.	Robinson, W.	USDA
2,344,267	Proteinous Compositions and Their Process of Production.	Reitz, H. C.	USDA
2,366,952	Proteinous Material	Balls, A. K. Hale, W. S. Harris, T. H.	USDA
2,373,192	Antioxidants	Lauer, W. M.	USDA
2,375,250	Antioxidant Compositions	Riemenschneider, R. W. Turer, J.	USDA
2,397,689	Thiol Derivatives	Pavlio, A. A. Peppel, W. J.	Army
2,399,597	Anthelminthic	Jones, W. R. Jones, H. A.	USDA
2,405,540	Nonbenzenoid Compounds	Butz, L. W.	USDA
2,408,182	Derivatives of Isoascorbic Acid	Wells, P. A. Swern, D.	USDA
2,408,897	Derivatives of Isoascorbic Acid	Wells, P. A. Swern, D.	USDA
2,413,055	Process for the Preparation of Riboflavin Concentrates.	Leviton, A.	USDA
2,423,475	Internal Surgical Dressing	Bice, C. W. MacMasters, M. M.	USDA
2,423,873	Method for Production of Increased Yields of Penicillin.	Coghill, R. D. Moyer, A. J.	USDA
2,424,003	Method for the Production of Riboflavin by Candida Flareri.	Tanner, F. W. Van Lanen, J. M.	USDA
2,424,184	Tertiary Amino Pentanols and Esters Thereof.	Morell, S. A.	USDA
2,425,094	Process for Obtaining Rutin from Buckwheat.	Griffin, E. L.	USDA
2,432,642	Catalytic Vapor Phase Oxidation of Nicotine to 3,2′-Nicotyrine.	Woodward C. F. Badgett, C. O. Haines, P. G.	USDA
2,442,141	Method for Production of Penicillin	Moyer, A. J.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,443,919	Fermentation Process for Production of Alpha Ketoglutaric Acid.	Lockwood, L. B. Stodola, F. H.	USDA
2,443,989	Method for Production of Penicillin	Moyer, A. J	USDA
2,445,128	Biological Process for the Production of Riboflavin.	Van Lanen, J. M. Tanner, F. W. Wickerham, L. J.	USDA
2,445,356	Thiol Derivatives	Kharasch, M. S. Weinhouse, S.	Army
2,445,366	Ophthalmic Compositions	Rigby, G. W	Army
2,449,152	Separation of Monoethanol Amine from Admixtures by Azeotropic Distillation with Chlorobenzene.	Speck, J. C	Navy
2,449,332	S-(Amidomethyl)-Dimercaptopropanols.	Signaigo, F. K	Army
2,449,340	Vitamin-B Complex Concentrate	Tanner, F. W Van Lanen, J. M.	USDA
2,453,534	Process for Isolation of Gramicidin	Olcott, H. S Fraenkel-Conrat, H. L.	USDA
2,465,040	Method and Apparatus for Controlling the Concentration of Vapors in the Atmosphere.	Robertson, O. H. Puck, T. T. Wise, H.	Army
2,467,602	2,3-Bis-(Benzamidomethylthio)-Propanol.	Signaigo, F. K	Army
2,472,267	Process for Preparing Gluten Sulfate and Salts Thereof.	Reitz, H. C	USDA
2,476,085	Purification of Subtilin	Dimick, K. P Fevold, H. L. Stubbs, J. J. Garibaldi, J. A. Lightbody, H. D.	USDA
2,476,107	Method for Production of Penicillin	Moyer, A. J	USDA
2,477,479	Antimalarials and Process of Making Them.	Elderfield, R. C. Head, J. D.	Army
2,477,480	Antimalarial Compounds and Process of Making Them.	Elderfield, R. C. Head, J. D.	Army
2,477,812	Microbiological Production of Riboflavin.	Leviton, A	USDA
2,481,763	Technique for Isolating Subtilin	Alderton, G Lineweaver, H. Klose, A. A.	USDA
2,485,162	7-Chloro-4-(1-Ethyl-4-Piperidylamino)-Quinoline.	Parham, B. G	Army
2,485,174	Basic Side Chain Substituted Quinoline Derivative.	Tarbell, D. S Shakespeare, N. Bunnett, J. F.	Army
2,488,274	6-Methoxy-8-(5-Isopropyl Amino Pentylamino) Quinoline Compounds and Quinine as Antimalarials.	Drake, N. L Van Hook, J. O.	Army
2,491,537	Liquid Injectable Oil-Pectin-Drug Therapeutic Compositions.	Welch, H	HEW
2,492,467	Quinoline Compounds having Antimalarial Properties.	Drake, N. L Van Hook, J. O	Army
2,494,487	Quinoline Derivatives having Antimalarial Properties.	Koepfli, J. B Buchman, E. R.	Army
2,494,801	Method for Production of 7-Chloro-4-Aminoquinolines.	Fisher, W. A	Army
2,494,851	Method for Producing 5,6-Dimethoxy-8-Nitroquinoline.	Williamson, T. A	Army
2,496,297	Process of Culturing Bacteria	Lockwood, L. B. Stodola, F. H.	USDA
2,498,174	Aluminum Hexacarbamide Periodide as Water Disinfectant.	Morris, J. C	Army
2,502,264	Quinoline Derivatives having Antimalarial Properties.	Lutz, R. E Koepfli, J. B. Buchman, E. R.	Army
2,504,847	Process for Obtaining Febrifugine Alkaloids.	Mead, J. F Brockman, J. A. Koepfli, J. B.	Army
2,504,875	Method for Producing 4-Hydroxy Quinolines.	Price, C. C Roberts, R. M. Herbrandson, H. F.	Army
2,504,895	Method for Preparation of Intermediate Compounds Suitable for Conversion into Nuclear Substituted Heterocyclic Compounds.	Snyder, H. R Jones, R. E.	Army
2,504,896	Method of Preparing Intermediates Suitable for Conversion into Nuclear Substituted Heterocyclic Compounds.	Snyder, H. R Jones, R. E.	Army
2,508,378	Method of Preparing Subtilin	Feeney, R. E Garibaldi, J. A.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,508,937	4-Methyl-8-(Dialkayl Aminoalkyl-amino) Quinolines and Method for Their Production.	Campbell, K. N.	Army
2,510,164	Water-Insoluble Derivatives of Nicotinic Acid and Process for Preparing Them.	Woodward, C. F. Badgett, C. O.	USDA
2,510,945	N-Cyclohexyl Nicotinamide	Badgett, C. O. Woodward, C. F.	USDA
2,512,551	Method for the Recovery of 7-Substituted-4-Hydroxyquinolines.	Price, C. C. Reitsema, R. H.	Army
2,513,351	Preparation of Gluten Phosphates	Olcott, H. S. Mohammad, A.	USDA
2,518,510	Stable Injectable Oil-Pectin Therapeutic Compositions.	Welch, H.	HEW
2,520,041	Process for Producing 2-Carboxy-quinoline Compounds.	Lisk, G. F. Stacy, G. W.	Army
2,520,042	Process for Producing 4-Hydroxy-2-Carboxy Quinoline Compounds.	Lisk, G. F. Stacy, G. W.	Army
2,520,043	Process for Preparing 4,7-Dichloro-8-Methylquinoline.	Lisk, G. F. Stacy, G. W.	Army
2,522,504	Gluten Phosphates and Method for Preparing Them.	Ferrel, R. E. Olcott, H. S.	USDA
2,555,383	Process for the Preparation of Chlorin E.	Wall, M. E.	USDA
2,561,364	Method for Producing Vitamin B_{12}	Hall, H. H. Tsuchiya, H. M.	USDA
2,569,300	Selective Oxidation of Steroid Alcohols.	Fieser, L. F. Rajagopalan, S.	HEW
2,572,897	Process of Production of Aureotracin, a Compound of Aureomycin and Bacitracin.	Welch, H.	HEW
2,578,738	Biological Production of Riboflavin	Pridham, T. G.	USDA
2,581,342	Water-Soluble Combination Products of Gossypol and Proteins.	Altschul, A. M. Castillon, L. E.	USDA
2,582,395	Ointments Containing Oil-Soluble Antioxidants.	Rigby, G. W.	Army
2,582,949	Water-Soluble Combination Products of Gossypol and Amino Acids.	Altschul, A. M. Castillon, L. E.	USDA
2,587,600	Purification of Rutin	Couch, J. F. Krewson, C. F.	USDA
2,601,350	Hydrolysis of Beta Lactam Linkage by Penicillinase.	Welch, H.	HEW
2,603,583	Pectin Penicillin Preparation	Welch, H.	HEW
3,610,155	Foam Breaker for Submerged Culture Fermentor.	Humfeld, H. Aeschlimann, E. Hoffman, J. R.	USDA
2,616,828	Method of Enzymatic Resolution of Amino Acids.	Levintow, L. Greenstein, J. P.	HEW
2,617,755	Antibiotic Production from Streptomyces Griseo-Carneus.	Benedict, R. G. Stodola, F. H.	USDA

SUBGROUP 28–41—Soap and glycerin

The following patents relate to establishments engaged in manufacturing soap in any form (including shampoos and shaving creams), and in manufacturing crude and refined glycerin.

Patent No.	Title of Invention	Inventor	Agency
2,466,340	Dehydrochlorination of Chlorinated Fatty Acids and Esters.	Van Atta, G. R. Dietrich, W. C.	USDA
2,586,860	Separation of Vinyl Esters of Long Chain Fatty Acids from the Corresponding Free Fatty Acids.	Port, W. S. Jordan, E. F. Swern, D.	USDA
2,598,729	Preparation of Drying Oils	Teeter, H. M.	USDA
2,610,153	Skin Cleaning Composition	McKinney, L. L. Cowan, J. C.	USDA

SUBGROUP 28–42—Cleaning and polishing preparations

The following patents relate to establishments engaged in manufacturing cleansers, washing powders, and washing compounds. Dry-cleaning preparations; metal, automobile, stove, shoe and other polishes; paint and varnish removers; waxes, stains, finishes and dressings for fabricated leather and other materials; and related products are also included in this subgroup.

Patent No.	Title of Invention	Inventor	Agency
2,449,107	Process of making Refined Sugarcane Wax.	Broeg, C. B. Balch, R. T.	USDA
2,452,093	Purification of Hard Waxes by Removal of Soft Fatty Components.	Balch, R. T.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,463,666	Nicotinium Salts and their Production.	Woodward, C. F. Weil, L.	USDA
2,537,983	Electrical Insulating and Potting Composition.	Franklin, P. J.	Army
2,578,725	Process of Protecting Metals Against Corrosion.	Michel, J. M. Hager, K. F.	Army
2,582,949	Water-Soluble Combination Products of Gossypol and Amino Acids.	Altschul, A. M. Castillon, L. E.	UDSA
2,614,992	Paint Stripping Compositions	Mankowich, A.	Army

SUBGROUP 28–43—Sulfonated oils and assistants

The following patents relate to establishments engaged in producing sulfonated oils and fats and related products such as tanning assistants, softeners, and soluble oils and greases.

Patent No.	Title of Invention	Inventor	Agency
2,302,070	Wetting Agent	Stirton, A. J. Peterson, R. F. Groggins, P. H.	USDA
2,318,201	Mothproofing Composition	Colman, W. Haller, H. L.	USDA
2,472,267	Process for Preparing Gluten Sulfate and Salts Thereof.	Reitz, H. C.	USDA
2,510,119	Production of Tannin and Soft-Grit Blasting Material from Nut Shells.	Lathrop, E. C.	USDA
2,595,221	Esters of Polyhydroxy-Benzoic Acids and Method for Their Preparation.	Weil, J. K. Ault, W. C. Nutting, G. C.	USDA

SUBGROUP 28–51—Paints, varnishes, lacquers, japans, and enamels

The following patents relate to establishments engaged in manufacturing paints, varnishes, lacquers, japans, enamels, and shellac. Important products include water paints and calcimines (dry and paste); paints in paste form (white or red lead in oil, zinc oxide in oil, colors in oil or japan); ready-mixed and semi-paste paints (paints in oil, undercoatings and primers, wall paints, stains, and butiminous paints); varnishes and varnish stains; clear and pigmented lacquers; enamels, japans, and shellac.

Patent No.	Title of Invention	Inventor	Agency
2,290,609	Process for Producing Fatty Acid Polyhydric Esters from Glycerides.	Goss, W. H. Johnstone, H. F.	USDA
2,319,365	Fractionating Apparatus	Reed, J. O.	USDA
2,322,252	Apparatus for Washing Oleoresin	Reed, J. O.	USDA
2,399,455	Process for Preparing Starch Acetate	Treadway, R. H.	USDA
2,405,830	Process of Recovering Peanut Protein.	Irving, G. W. Merrifield, A. L. Burnett, R. S. Parker, E. D.	USDA
2,406,369	Preparation of Organic Solvent-Soluble Unsaturated Carbohydrate Ethers and Products Produced Thereby.	Hamilton, R. M. Nichols, P. L.	USDA
2,430,897	Process for Vapor-Phase Dehydrochlorination.	Van Atta, G. R. Houston, D. F.	USDA
2,446,116	Process of Purifying Carotene Contaminated with Chlorophyll and Xanthophyll.	Wall, M. E. Kelley, E. G.	USDA
2,453,150	Polyesters of Dimethylene D-Gluconic Acid.	Mehltretter, C. L.	USDA
2,459,708	Dispersions of Proteins in Aqueous Detergents.	Lundgren, H. P.	USDA
2,463,869	Mixed Allyl Ethers of Starch	Hamilton, R. M. Yanovsky, E.	USDA
2,466,340	Dehydrochlorination of Chlorinated Fatty Acids and Esters.	Van Atta, G. R. Dietrich, W. C.	USDA
2,477,116	Protective Coating Compositions and Methods for Producing the Same.	Cowan, J. C. Teeter, H. M.	USDA
2,481,366	Green Camouflage Paint	Thimann, K. V.	Navy
2,494,565	Paint Compositions from Catalytically Conjugated Oils.	Lewis, A. J. Moser, H. A. Cowan, J. C.	USDA
2,498,694	Preparation of Aqueous Dispersions by Polymerization in the Presence of Ammonium Alginate.	Mast, W. C.	USDA
2,504,989	Modified Rosin Esters	Lawrence, R. V. Kaufmann, M. W.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,517,580	Mildew Resistant Paint	Lewis, A. J	USDA
2,520,963	Production of Improved Cellulosic Materials.	Reeves, R. E	USDA
2,592,655	Protective Coating	Carlston, E. F Whiting, L. R.	Navy
2,594,303	Modified Drying Oils	Fisher, C. H Zief, M. Hockett, R. C.	USDA

SUBGROUP 28–52—Inorganic color pigments

The following patents relate to establishments engaged in manufacturing dry colors and inorganic color pigments. Important products include black pigments such as black iron oxide, white pigments such as white lead and blanc fixé, and titanium pigments; color pigments such as ultramarine and vermilion; and chrome, iron, and other dry colors.

Patent No.	Title of Invention	Inventor	Agency
2,133,289	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H	TVA
2,133,290	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H	TVA
2,505,772	Alkyl Ethers of 3-Hydroxyphenothiazine.	Houston, D. F	USDA
2,514,115	Method of Dissolving Difficultly Soluble Metal Sulfates.	Angerman, A. H	AEC
2,517,580	Mildew Resistant Paint	Lewis, A. J	USDA

Subgroup 28–53—Whiting, putty, wood fillers, and allied paint products

The following patents relate to establishments engaged in manufacturing whiting from limestone or chalk; whiting ground in oil (putty); and wood fillers and allied paint products.

Patent No.	Title of Invention	Inventor	Agency
2,430,897	Process for Vapor-phase Dehydrochlorination.	Van Atta, G. R Houston, D. F.	USDA
2,466,340	Dehydrochlorination of Chlorinated Fatty Acids and Esters.	Van Atta, G. R Dietrich, W. C.	USDA

SUBGROUP 28–61—Hardwood distillation

The following patents relate to establishments engaged in the destructive distillation of hardwood, resulting in the production of charcoal, tars, oils acids, and alcohols.

Patent No.	Title of Invention	Inventor	Agency
2,220,624	Process for the Hydrogenation of Lignin and Waste Pulp Liquors and the Products Thereof.	Sherrard, E. C Harris, E. E. Saeman, J. F.	USDA
2,438,300	Process for the Purification of Acetic Acid by Azeotropic Distillation.	Schniepp, L. E	USDA

SUBGROUP 28–62—Softwood distillation

The following patents relate to establishments engaged in softwood distillation, resulting in the production of wood naval stores either by the steam-and-solvent process or by the destructive distillation process. Important products include wood turpentine, wood rosin, pine oil, pitch, tar, tar oils, and wood creosote. Patents regarding establishments engaged in manufacturing turpentine and rosin by distillation of pine gum are classified in Subgroup 28–63.

Patent No.	Title of Invention	Inventor	Agency
2,272,583	Filtering Apparatus	Reed, J. O	USDA
2,285,048	Filter Apparatus	Palkin, S	USDA
2,307,078	Process for Refining Oleoresin	Reed, J. O	USDA
2,364,104	Process for Treating Crude Pine Tars	Smith, W. C	USDA
2,377,183	Method for Refining and Distilling Oleoresin.	Reed, J. O	USDA
2,379,662	Process for Treating Crude Pine Tar	Smith, W. C	USDA
2,395,190	Process for Refining Crude Oleoresin	Lawrence, R. V	USDA
2,411,925	Process for Refining Oleoresin	Lawrence, R. V	USDA
2,429,264	Drying Rosin Oil and Method of Producing Same.	Fleck, E. E	USDA
2,434,869	Bark Chipping Hack for Turpentining Trees.	Snow, A. G Lanier, H. R.	USDA
2,436,359	Stimulation of Production of Oleoresins and Gums in Coniferous Trees.	Hepting, G. H	USDA

Patent No.	Title of Invention	Inventor	Agency
2,500,194	Flash Distillation of Turpentine	McConnell, N. C. Mims, L. W. Poole, H. P. Lanier, H. R.	USDA
2,567,250	Aluminum Resinates and Method of Preparation.	St. Clair, W. E. Lawrence, R. V.	USDA

SUBGROUP 28–63—Gum naval stores

The following patents relate to establishments engaged in manufacturing turpentine and rosin by the distillation of pine gum. Patents regarding establishments engaged in manufacturing turpentine and rosin by wood distillation are classified in Subgroup 28–62.

Patent No.	Title of Invention	Inventor	Agency
2,039,481	Refining of Natural Oleoresin	Frey, R. W. Smith, W. C.	USDA
2,254,785	Process for Gum Refining	Smith, W. C. Reed, J. O. Veitch, F. P. Shingler, G. P.	USDA
2,272,583	Filtering Apparatus	Reed, J. O.	USDA
2,277,351	Process for Stabilizing Rosin and Pine Oleoresin.	Pohle, W. D. Smith, W. C.	USDA
2,285,048	Filter Apparatus	Palkin, S.	USDA
2.295,235	Process for Producing Rosin	Reed, J. O.	USDA
2,307,078	Process for Refining Oleoresin	Reed, J. O.	USDA
2,319,365	Fractionating Apparatus	Reed, J. O.	USDA
2,322,252	Apparatus for Washing Oleoresin	Reed, J. O.	USDA
2,344,267	Proteinous Compositions and Their Process of Production.	Reitz, H. C.	USDA
2,356,798	Apparatus for Melting and Processing Crude Oleoresin.	Reed, J. O.	USDA
2,363,692	Production of Rosin and Turpentine	Reed, J. O.	USDA
2,364,104	Process for Treating Crude Pine Tars.	Smith, W. C.	USDA
2,377,183	Method for Refining and Distilling Oleoresin.	Reed, J. O.	USDA
2,379,662	Process for Treating Crude Pine Tar	Smith, W. C.	USDA
2,395,190	Process for Refining Crude Oleoresin	Lawrence, R. V.	USDA
2,411,925	Process for Refining Oleoresin	Lawrence, R. V.	USDA
2,429,264	Drying Rosin Oil and Method of Producing Same.	Fleck, E. E.	USDA
2,434,869	Bark Chipping Hack for Turpentining Trees.	Snow, A. G. Lanier, H. R.	USDA
2,436,359	Stimulation of Production of Oleoresins and Gums in Coniferous Trees.	Hepting, G. H.	USDA
2,472,267	Process for Preparing Gluten Sulfate and Salts Thereof.	Reitz, H. C.	USDA
2,500,194	Flash Distillation of Turpentine	McConnell, N. C. Mims, L. W. Poole, H. P. Lanier, H. R.	USDA
2,572,071	Metal Resinates and Method of Preparation.	St. Clair, W. E. Lawrence, R. V.	USDA
2,572,864	Pine-Gum Rosin DDT Insecticide Compositions.	Sumerford W. T. Jensen, J. A.	HEW
2,598,684	Pine Gum Distillation	Goldblatt, E. A. McConnell, N. C. Summers, H. B.	USDA

SUBGROUP 28–64—Natural dyeing materials

The following patents relate to establishments engaged in manufacturing natural dyeing materials from wood, bark, and other vegetable and animal materials.

Patent No.	Title of Invention	Inventor	Agency
2,557,164	Method of Isolating Quercitrin from Peanut Hulls.	Wender, S. H.	HEW
2,588,450	Process of Regenerating Activated Carbon Loaded with Absorbed Gold.	Zadra, J. B.	Int

SUBGROUP 28–65—Natural tanning materials

The following patents relate to establishments engaged in manufacturing solid and liquid tanning extracts from wood, bark, and other vegetable materials.

Patent No.	Title of Invention	Inventor	Agency
2,505,818	Solubilizing Tanning Bark Extract with Waste Sulfite Liquors.	Williams, K. T. Potter, E. F.	USDA
2,510,119	Production of Tannin and Soft-Grit Blasting Material from Nut Shells.	Lathrop, E. C.	USDA
2,594,291	Process for the Production of High Purity Tanning Extracts.	Cordon, T. C. Wickerham, L. J.	USDA

SUBGROUP 28–71—Fertilizers

The following patents relate to establishments engaged in manufacturing and mixing fertilizers.

Patent No.	Title of Invention	Inventor	Agency
2,026,519	Apparatus for Making Phosphoric Acid.	Curtis, H. A.	TVA
2,029,309	Preparing Phosphate Charging Stock.	Curtis, H. A. Abrams, A. J.	TVA
2,037,706	Manufacture of Ammoniated Superphosphates.	Curtis, H. A.	TVA
2,039,297	Separating Phosphorus	Curtis, H. A.	TVA
2,040,081	Agglomerating Fine Phosphate Rock.	Curtis, H. A.	TVA
2,043,238	Manufacture of Di-Calcium Phosphate.	Curtis, H. A.	TVA
2,044,774	Treating Phosphate Rock to Eliminate Fluorine.	Curtis, H. A.	TVA
2,051,029	Manufacture of Ammonium Phosphates.	Curtis, H. A.	TVA
2,053,266	Manufacture of Calcium Phosphates.	Curtis, H. A.	TVA
2,067,538	Process for Making Double or Treble (Calcium) Superphosphate.	MacIntire, W. H.	TVA
2,069,225	Producing Phosphorus and Phosphate Fertilizer.	Curtis, H. A.	TVA
2,069,226	Making Phosphate Fertilizer and Nitric Acid.	Curtis, H. A.	TVA
2,070,581	Guanidine Phosphate Fertilizer	Curtis, H. A.	TVA
2,070,582	Making Superphosphate	Curtis, H. A.	TVA
2,072,980	Manufacture of Granular Calcium Phosphates.	Curtis, H. A.	TVA
2,072,981	Producing Phosphorus	Curtis, H. A.	TVA
2,075,801	Method of Nitrifying Superphosphate.	Curtis, H. A.	TVA
2,086,565	Making Calcium Phosphate Fertilizer.	MacIntire, W. H.	TVA
2,093,460	Making Manganese Phosphate Fertilizer.	MacIntire, W. H.	TVA
2,093,461	Making Manganese Phosphate	MacIntire, W. H.	TVA
2,095,993	Manganese Phosphate Fertilizer	MacIntire, W. H.	TVA
2,095,994	Making Tri-Calcium Phosphate	MacIntire, W. H.	TVA
2,107,857	Process of Oxidizing Phosphorus	Emmett, P. H.	USDA
2,108,940	Process for Making D-Calcium Phosphate.	MacIntire, W. H.	TVA
2,110,870	Oxidizing Elemental Phosphorus	Curtis, H. A.	TVA
2,113,574	Calcium Metaphosphate	Curtis, H. A.	TVA
2,114,280	Making Guanidine Salts	Aldred, J. W.	TVA
2,125,297	Oxidizing Elemental Phosphorus	Junkins, J. N.	TVA
2,133,290	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H.	TVA
2,137,674	Process for Making Double or Treble Calcium and Magnesium Superphosphate.	MacIntire, W. H.	TVA
2,143,001	Producing Phosphorus	Curtis, H. A. Copson, R. L.	TVA
2,143,025	Making Monocalcium Phosphate	Newton, R. H.	TVA
2,143,438	Process for the Production of Monocalcium Chlorophosphate.	Fox, E. J.	USDA
2,143,865	Treating Phosphate Rock to Eliminate Fluorine.	Copson, R. L.	TVA

Patent No.	Title of Invention	Inventor	Agency
2,162,738	Extracting Nicotine from Tobacco	McCoy, C. E	TVA
2,173,825	Apparatus for Making Calcium Metaphosphate.	Curtis, H. A Heaton, R. C.	TVA
2,173,826	Making Calcium Metaphosphate Fertilizer.	Curtis, H. A	TVA
2,197,885	Means and Method for Conditioning Manure and Controlling Insect Pests.	Brodie, D. A	HEW
2,273,461	Process for the Production of Calcium Metaphosphate and Hydrogen.	Brunauer, S Shultz, J. F.	USDA
2,280,848	Making Alkali Metal Phosphates	Pole, G. R	TVA
2,287,759	Process for the Granulation of Fertilizers.	Hardesty, J. O Ross, W. H. Jacob, K. D.	USDA
2,297,300	Process for the Granulation of Crystalline Materials.	Hardesty, J. O Ross, W. H.	USDA
2,307,253	Process for the Production of Noncaking Fertilizer Materials.	Yee, J. Y Davis, R. O.	USDA
2,309,919	Process for the Production of Chlorine.	Reed, D. L	USDA
2,320,342	Treating Ferrophosphorus	Bridger, G. L	TVA
2,353,658	Process for the Production Dicalcium Phosphate and Ammonium Chloride.	Fox, E. J	USDA
2,368,649	Defluorinating Rock Phosphate	Elmore, K. L	TVA
2,379,929	Separating Protein from Waste Material.	Rushton, E. R	TVA
2,391,480	Laboratory Hammer Mill	Mullins, J. F Hardesty, J. O. Ross, W. H. Shipley, E. S.	USDA
2,410,043	Process for Manufacturing Calcium Fluoride.	Breton, E. J Waggaman, W. H.	Int
2,474,831	Method for Defluorinating Phosphate Rock.	Elmore, K. L	TVA
2,493,031	Prevention of Degradation of Textile Fibers by Acids.	Reid, J. D Ward, W. K.	USDA
2,499,385	Method for Defluorinating Phosphate Rock.	Hubbuch, T. N Hignett, T. P.	TVA
2,522,500	Production of Phosphatic Fertilizers	Bridger, G. L	TVA
2,528,514	Method for the Manufacture of Superphosphate.	Harvey, S. A Bridger, G. L.	TVA
2,589,272	Production of Calcium Metaphosphate.	Miller, P	TVA

SUBGROUP 28–81—Cottonseed products

The following patents relate to establishments engaged in manufacturing cottonseed oil, and byproduct cake, meal, and linters.

Patent No.	Title of Invention	Inventor	Agency
2,191,455	Extracting Oil	Davis, A. L Bartlett, L. H.	TVA
2,358,392	Method of Purifying Pyrethrum Extract.	Goodhue, L. D Haller, H. L.	USDA
2,376,568	Treatment of Oilseeds	Altschul, A. M Karon, M. L.	USDA
2,376,852	Treatment of Oilseeds	Altschul, A. M Karon, M. L.	USDA
2,462,933	Process for Manufacturing Artificial Fiber from Proteins Contained in Cottonseed.	Arthur, J. C Karon, M. L. Pomes, A. F. Altschul, A. M.	USDA
2,482,141	Heavy Gravity Liquid Separation of Cotton Seed.	Boatner, C. H Hall, C. M. Merrifield, A. L.	USDA
2,563,808	Water-Dispersible Combination Products of Gossypol and Carbohydrates.	Altschul, A. M Castillon, L. E.	USDA
2,579,526	Process for the Fractionation of Cottonseed.	Spadaro, J. J Pollard, E. F. Gastrock, E. A. Vix, H. L. Murphey, C. H. Persell, R. M.	USDA
2,581,342	Water-Soluble Combination Products of Gossypol and Proteins.	Altschul, A. M Castillon, L. E.	USDA
2,582,949	Water-Soluble Combination Products of Gossypol and Amino Acids.	Altschul, A. M Castillon, L. E.	USDA
2,584,108	Process for the Continuous Recycling of an Alcoholic Oil Solvent in Oil Extraction.	Beckel, A. C Cowan, J. C.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,610,973	Stabilization of Glyceride Oils	Evans, C. D. Schwab, A. W. Cowan, J. C.	USDA

SUBGROUP 28–83—Soybean products

The following patents relate to establishments engaged in manufacturing soybean oil, and byproduct cake and meal.

Patent No.	Title of Invention	Inventor	Agency
2,210,481	Aqueous Dispersion of Hardened Protein.	Brother, G. H. Smith, A. K.	USDA
2,238,307	Thermoplastic Protein Material	Brother, G. H. McKinney, L. L.	USDA
2,262,422	Protein Plastic Molding Compound and Method of Preparing the Same.	Brother, G. H. McKinney, L. L.	USDA
2,357,839	Plastic Composition	Manley, R. H. Evans, C. D.	USDA
2,384,443	Plastic Composition and Method of Preparing Same.	Cowan, J. C. Teeter, H. M.	USDA
2,427,699	Crown Closures	Lathrop, E. C. Aronovsky, S. I. Talburt, W. F.	USDA
2,429,219	Process of Making Linear Superpolyesters.	Cowan, J. C. Wheeler, D. H.	USDA
2,444,241	Soy Whip	Beckel, A. C. DeVoss, L. I. Belter, P. A. Smith, A. K.	USDA
2,450,940	Polyamides from Polymeric Fat Acids.	Cowan, J. C. Falkenburg, L. B. Teeter, H. M. Skell, P. S.	USDA
2,456,647	Acrylic Esters of Olefinic Alcohols and Polymers Thereof and Method of Making Them.	Rehberg, C. E. Fisher, C. H.	USDA
2,458,191	Resinous Compositions of Starch Ethers with Other Resins.	Nichols, P. L. Smith, L. T.	USDA
2,459,369	Method of Extracting Rubber from Plants.	Tint, H. Murray, C. W.	USDA
2,460,117	Still and Decanter for the Recovery of Products from Alcoholic Solutions of Oleaginous Materials.	Beckel, A. C. Belter, P. A.	USDA
2,461,070	Process to Produce a Stabilized Protein-Formaldehyde Dispersion.	McKinney, L. L.	USDA
2,462,817	Copolymers of Tetra-Allyl Pentaerythritol.	Smith, L. T.	USDA
2,463,608	Process for Purifying Acrylic Esters	Fein, M. L. Fisher, C. H.	USDA
2,469,147	Process for the Recovery of Oil and Byproducts from Alcoholic Solutions of Oleaginous Materials.	Beckel, A. C. Belter, P. A.	USDA
2,473,544	Polyalkyl-Cyclohexanol Acrylates	Rehberg, C. E. Fisher, C. H.	USDA
2,477,293	Aryl Acrylates and Methacrylates and Their Polymers.	Filachione, E. M. Fisher, C. H.	USDA
2,478,248	Method of Producing Prolamine Filaments.	Croston, C. B. Evans, C. D.	USDA
2,483,791	Diene Addition Product and Process for Making It.	Teeter, H. M. Scholfield, C. R., Cowan, J. C.	USDA
2,494,565	Paint Compositions from Catalytically Conjugated Oils.	Lewis, A. J. Moser, H. A. Cowan, J.	USDA
2,495,706	Vegetable Gel	DeVoss, L. I. Beckel, A. C. Belter, P. A.	USDA
2,511,833	Method for Stripping Solvents from Oils.	Beckel, A. C. Belter, P. A.	USDA
2,517,580	Mildew Resistant Paint	Lewis, A. J.	USDA
2,583,602	Stabilization of Soybean Oils with P-Toluene Sulfonic Acid.	Cowan, J. C. Schwab, A. W. Evans, C. D.	USDA
2,600,388	Method of Bonding Using Heat Sealing Protein Adhesives.	Beckel, A. C. Cowan, J. C. Belter, P. A.	USDA
2,610,153	Skin Cleaning Composition	McKinney, L. L. Cowan, J. C.	USDA
2,610,973	Stabilization of Glyceride Oils	Evans, C. D. Schwab, A. W. Cowan, J. C.	USDA

SUBGROUP 28–87—Fatty acids

The following patents relate to establishments engaged in manufacturing fatty acids such as stearic and oleic acids.

Patent No.	Title of Invention	Inventor	Agency
2,285,059	Process for Preparing Aldehydes	Scanlan, J. T. Swern, D.	USDA
2,304,064	Process for Producing Aldehydes	Scanlan, J. T. Swern, D.	USDA
2,368,435	Antioxidant	Wells, P. A. Riemenschneider, R. W.	USDA
2,384,443	Plastic Composition and Method of Preparing Same.	Cowan, J. C. Teeter, H. M.	USDA
2,399,156	Treatment of Rubber	Hanslick, R. S. Stamberger, P. Eskew, R. K.	USDA
2,430,897	Process for Vapor-Phase Dehydrochlorination.	Van Atta, G. R. Houston, D. F.	USDA
2,440,349	Process for Preparing an Alkylolamide of a Trihydroxystearic Acid.	Schaeffer, B. B.	USDA
2,440,383	Synergistic Antioxidant Composition of the Acidic Type.	Riemenschneider, R. W. Turer, J.	USDA
2,443,280	Hydroxylation Process	Swern, D. Scanlan, J. T.	USDA
2,445,892	Amino Fatty Derivatives	Swern, D. Findley, T. W.	USDA
2,448,602	Glycidyl Esters	Kester, E. B. Preusser, H. M.	USDA
2,448,626	Alkylol Amine Salts of Hydroxy Fatty Acids and Process for Their Preparation.	Schaeffer, B. B.	USDA
2,452,092	Rubberlike Product and Process of Preparation.	Ault, W. C. Schaeffer, B. B.	USDA
2,457,611	Process for the Preparation of Monoethenoic Acids and Their Esters.	Swern, D. Ault, W. C.	USDA
2,466,340	Dehydrochlorination of Chlorinated Fatty Acids and Esters.	Van Atta, G. R. Dietrich, W. C.	USDA
2,475,557	Copolymers of Unsaturated Esters of 9,10-Dihydroxystearic Acid.	Swern, D. Dickel, G. B.	USDA
2,477,116	Protective Coating Compositions and Methods for Producing the Same.	Cowan, J. C. Teeter, H. M.	USDA
2,492,173	Flow of Thickened Fluids	Mysels, K. J.	Army
2,527,597	Esters of Oleic Acid with Unsaturated Alcohols.	Swern, D. Dickel, G. B.	USDA
2,557,159	Halogenated Unsaturated Higher Fatty Acids and Derivatives.	Teeter, H. M. Cowan, J. C.	USDA
2,562,900	Acylating Castor Oil	Fisher, C. H. Fein, M. L.	USDA
2,572,892	Oxidation of Oleic Acid	Swern, D. Knight, H. B.	USDA
2,586,860	Separation of Vinyl Esters of Long Chain Fatty Acids from the Corresponding Free Fatty Acids.	Port, W. S. Jordan, E. F. Swern, D.	USDA
2,587,650	Method for Defatting Starch	Rist, C. E. Davis, H. A. Wolff, I. A.	USDA
2,605,270	Amides of 9,10-Dihydroxystearic Acid.	Swern, D. Roe, E. T. Scanlan, J. T.	USDA

SUBGROUP 28–91—Ink

The following patents relate to establishments engaged in manufacturing printing, writing, stamp pad, and lithographic inks.

Patent No.	Title of Invention	Inventor	Agency
2,088,006	Ink	Zimmerman, E. W.	Com
2,208,551	Quick-Drying Stamp-Pad Ink	Waters, C.	Com
2,426,194	Ink	Fishbach, A. Friedman, M.	Army

SUBGROUP 28–92—Essential oils

The following patents relate to establishments engaged in distilling, expressing, and refining natural essential oils. Synthetic perfume and flavoring materials are classified in Subgroup 28–29.

Patent No.	Title of Invention	Inventor	Agency
2,285,059	Process for Preparing Aldehydes	Scanlan, J. T. Swern, D.	USDA
2,304,064	Process for Producing Aldehydes	Scanlan, J. T. Swern, D.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,319,365	Fractionating Apparatus	Reed, J. O	USDA
2,322,252	Apparatus for Washing Oleoresin	Reed, J. O	USDA
2,445,931	Process of Extraction from Vegetable Materials.	Beckel, A. C Belter, P. A. Smith, A. K.	USDA

SUBGROUP 28–93—Perfumes, cosmetics, and other toilet preparations

The following patents relate to establishments engaged in manufacturing perfumes, cosmetics, and other toilet preparations. Synthetic perfume and flavoring materials are classified in Subgroup 28–29, and soap in Subgroup 28–41.

Patent No.	Title of Invention	Inventor	Agency
2,507,546	Process for Producing Myrcene from Beta-Pinene.	Savich, T. R Goldblatt, L. A.	USDA
2,605,186	Stabilization of Glyceride Oils with Acetone Dicarboxylic Acid.	Schwab, A. W Moser, H. A. Evans, C. D.	USDA

SUBGROUP 28–94—Glue and gelatin

The following patents relate to establishments engaged in manufacturing (1) glue from vegetable or animal materials and (2) edible, technical, photographic, or pharmaceutical gelatins from animal materials.

Patent No.	Title of Invention	Inventor	Agency
2,399,161	Process for Producing Glues and Adhesives from Keratin Protein Materials.	Brother, G. H Binkley, C. H.	USDA
2,421,113	Vegetable Protein Hydrates	Burnett, R. S Roberts, E. J.	USDA
2,443,897	Process for the Production of Sweet Potato Starch.	Dexter, G. M Thuber, F. H.	USDA
2,454,676	Adhesive Compositions	Skow, N. A Seiler, C. J. Oriani, R. A. Whitaker, J. S.	Army
2,457,577	Production of Low-Methoxyl Pectinic Acids from Aluminum-Pectin Compositions.	Maclay, W. D Shepherd, A. D. McCready, R. M. Graham, R. P.	USDA
2,458,772	Polymerizing the Glyceryl Ester of Levo-Pimaric Acid-Maleic Anhydride Adduct.	Fleck, E. E	USDA
2,494,537	Cold-Setting Resorcinol Glue Composition and Process of Preparation.	Babcock, G. E Smith, A. K.	USDA
2,543,783	Method of Purifying Rutin	Krewson, C. F	USDA
2,580,391	Fiberboard Construction	Babcock, G. E Johnsen, V. L. Smith, A. K.	USDA

SUBGROUP 28–95—Bone black, carbon black, and lamp black

The following patents relate to establishments engaged in manufacturing bone black, carbon black (channel and furnace black), and lamp black.

Patent No.	Title of Invention	Inventor	Agency
2,369,139	Method of Treating Bone Black	Deitz, V. R	Com
2,546,903	Process of Producing Activated Carbon.	Morrell, J. C	Army
2,557,948	Process for the Regeneration of Bone Char.	Deitz, V. R	Com
2,602,047	Method of Concentrating Isotopic Carbon.	Calvin, M Weigl, J. W.	AEC

SUBGROUP 28–96—Compressed and liquefied gases

The following patents relate to establishments engaged in manufacturing gases for sale in compressed, liquid, and solid form, such as acetylene, carbon dioxide (dry ice), helium, nitrous oxide, refrigerant gases (except ammonia), and oxygen.

Patent No.	Title of Invention	Inventor	Agency
2,094,027	Apparatus for Electrical Carbonization of Coal.	Stitzer, R. B	TVA
2,151,299	Process and Apparatus for the Extraction of Helium from Gaseous Mixtures.	Miller, B. D	Int
2,225,669	Purification of Refrigerant	Taylor, R. B	TVA
2,255,069	Method and Apparatus for Separating and Concentrating Gases.	Maier, C. G	Int

Patent No.	Title of Invention	Inventor	Agency
2,258,594	Method and Apparatus for Separating Gases and Isotopes.	Brewer, A. K Bramley, A.	USDA
2,273,461	Process for the Production of Calcium Metaphosphate and Hydrogen.	Brunauer, S Shultz, J. F.	USDA
2,309,919	Process for the Production of Chlorine.	Reed, D. L	USDA
2,339,300	Refrigerant Composition	Taylor, R. B	TVA
2,353,193	Recovery of Metallic Magnesium	Sayers, R. R	Int
2,457,328	1,2-Epoxides and Process for their Preparation.	Swern, D Billen, G. N.	USDA
2,457,329	Polymers of 9,10-Epoxyoctadecanol and Process for their Preparation.	Swern, D Billen, G. N.	USDA
2,476,284	Cobalt Solution Purification	Churchward, R. E. Shelton, F. K.	Int
2,479,727	Elimination of Fissures with Carbon Dioxide.	Daniels, F	Army
2,483,661	Discharge Device	Neas, C. C	Navy
2,487,360	Nitrogen Purification Process	Newton, A. S	AEC
2,492,365	Dispensing Nozzle	Miller, O. E	AEC
2,502,074	Method and Apparatus for Pumping Corrosive Mediums.	Brown, H. S Hubble, H. H.	AEC
2,506,438	Electrolytic Process for Production of Fluorine.	Whitaker, G. C	AEC
2,516,141	Apparatus and Method for Gasifying Carbonaceous Material.	Newman, L. L Donavan, J. T.	Int
2,516,934	Gas Generator	Weaver, E. R	Com
2,521,634	Acoustic Chamber for Analysis of Gaseous Mixtures.	Janssen, W. H Mikelson, W.	AEC
2,521,937	Method of Purifying Inert Gases	Newton, A. S	AEC
2,533,138	Purification of Hydrogen	Newton, A. S	AEC
2,536,610	Hydrogen Purification System	King, P Baker, C. P. Schreiber, R. E.	AEC
2,540,151	Separation of Oxygen from Gas Mixtures Containing Same.	Weller, S. W Steiner, W. A.	Int
2,540,152	Recovery of Light Elemental Gases	Weller, S. W	Int
2,544,285	Electrolytic Cell	Stuart, K. E Osborne, S. G.	AEC
2,547,874	Hydrogen Purification Method	Klema, E. D	AEC
2,562,150	Electrical Contact for Electrolytic Cells.	Osborne, S. G	AEC
2,579,234	Vacuum Seal for Fluorine Generation System.	Hubbard, D. O	AEC
2,593,477	Process of Underground Gasification of Coal.	Newman, L. L Schroeder, W. C.	Int
2,595,284	Method and Apparatus for Treatment of Gaseous Hydrocarbon Mixtures.	Mullins, P. V	Int
2,597,907	Apparatus for the Separation of Gases by Fractional Permeation through Membranes.	Steiner, W. A Weller, S. W.	Int
2,601,272	Apparatus and Procedure for the Determination of Helium in Gases.	Frost, E. M	Int
2,604,389	Compressed Fuel Units of Diisopropylideneglyoxal.	Berdick, M Hochstadt, H. R.	Army
2,605,170	Nitrogen Production	Fugassi, J. P	Navy

SUBGROUP 28–97—Insecticides, fungicides and rodenticides

The following patents relate to establishments engaged in manufacturing rodenticides and inorganic insecticides such as copper, calcium, and lead arsenates, lime-sulfur, sulfur-dust, Paris green, and calcium and sodium arsenite; organic insecticides such as rotenone, pyrethrum, and nicotine-bearing insecticides; and miscellaneous insecticides such as organic thiocyanates, DDT, xanthone, and similar products; and fungicides such as copper, sulfur, and mercury-containing fungicides.

Patent No.	Title of Invention	Inventor	Agency
2,044,502	Process for the Purification of Pyrethrin Concentrates.	Haller, H. L LaForge, F. B.	USDA
2,084,461	Process for Inducing Uniformity of Blooming and Fruit Production in Fruiting Plants.	Sorber, D. G Kimball, M. H.	USDA
2,162,738	Extracting Nicotine from Tobacco	McCoy, C. E	TVA
2,173,386	Insecticides	Vivian, D. L	USDA
2,191,299	Insecticide	Smith, L. E	USDA
2,191,300	Insecticide	Smith, L. E	USDA

Patent No.	Title of Invention	Inventor	Agency
2,191,301	Insecticide	Smith, L. E.	USDA
2,197,249	Insecticide	Claborn, H. V. Smith, L. E.	USDA
2,200,564	Insecticide	Schechter, M. S. Haller, H. L.	USDA
2,224,243	Insecticide	Bowen, C. V.	USDA
2,239,832	Insecticide	Smith, L. E.	USDA
2,258,319	Method for Control of Japanese Beetle.	Dutky, S. R.	USDA
2,261,735	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,263,594	Making Cupric Meta-Arsenite	Rushton, E. R.	TVA
2,263,827	Insect Larval Lure	Siegler, E. H.	USDA
2,269,891	Insecticide and Fungicide	Bowen, C. V. Dearborn, F. E.	USDA
2,269,892	Insecticide and Fungicide	Carter, R. H.	USDA
2,269,893	Insecticide	Carter, R. H.	USDA
2,272,044	Insect Repellent	Carter, R. H.	USDA
2,272,047	Insecticide	Freeman, A. F.	USDA
2,286,636	Insecticide	Murray, C. W.	USDA
2,291,192	Insecticide	Smith, L. E.	USDA
2,291,193	Insecticide	Smith, L. E.	USDA
2,291,194	Insecticide	Smith, L. E.	USDA
2,292,756	Insecticide	Haller, H. L.	USDA
2,293,890	Process for Propagating Bacteria	Dutky, S. R.	USDA
2,306,434	Method of Applying Insecticides	Goodhue, L. D. Sullivan, W.	USDA
2,313,976	Apparatus for Dispersing Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,318,201	Mothproofing Composition	Colman, W. Haller, H. L.	USDA
2,321,023	Method of Applying Parasiticides	Goodhue, L. D. Sullivan, W. N.	USDA
2,326,350	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,328,726	Insecticide	LaForge, F. B. Haller, H. L.	USDA
2,331,117	Dispensing Apparatus	Goodhue, L. D. Sullivan, W. N.	USDA
2,342,406	Fumigant Bag	Latta, R. Yeomans, A. H.	USDA
2,345,891	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,892	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,893	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,894	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,895	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,896	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,897	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,898	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,899	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,900	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,901	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,902	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,903	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,904	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,905	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,906	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,907	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA

Patent No	Title of Invention	Inventor	Agency
2,345,908	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,345,909	Synergists to Aerosol Insecticides	Sullivan, W. N. Goodhue, L. D.	USDA
2,349,344	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,354,192	Insecticide	Bowen, C. V.	USDA
2,354,193	Insecticide	Bowen, C. V.	USDA
2,354,206	Fungicide	Goldsworthy, M. C.	USDA
2,354,940	Fungicide	Carter, R. H. Goldsworthy, M. C.	USDA
2,356,185	Compounds of Nicotine	Smith, C. R.	USDA
2,356,801	Insect Repellent Composition	Travis, B. V. Jones, H. A.	USDA
2,358,392	Method of Purifying Pyrethrum Extract.	Goodhue, L. D. Haller, H. L.	USDA
2,358,925	Insecticide	Haller, H. L. Barthel, W. F.	USDA
2,358,986	Combined Insecticide and Germicide	McGovran, E. R. Goodhue, L. D.	USDA
2,362,128	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,366,952	Proteinous Material	Balls, A. K. Hale, W. S. Harris, T. H.	USDA
2,372,183	Purification of Pyrethrum Extract	Barthel, W. F. Haller, H. L.	USDA
2,374,479	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,388,684	Insecticide	Gertler, S. I. Haller, H.L.	USDA
2,389,427	Insect Repellents	Gertler, S. I.	USDA
2,390,848	Rodenticide	Richter, C. P.	Army
2,392,455	Insecticide	Bowen, C. V. Smith, L. E.	USDA
2,392,961	Insecticides	Woodward, C. F. Talley, F. B. Mayer, E. L. Beinhart, E. G.	USDA
2,395,827	Airplane Spray Unit	Husman, C. N. Longcoy, O. M.	USDA
2,396,019	Insecticides	Murray, C. W.	USDA
2,400,006	Insect Repellent Compositions	Jones, H. A. Travis, B. V.	USDA
2,403,495	Insecticide	Bowen, C. V.	USDA
2,405,743	Insecticidal Compositions	Gertler, S. I.	USDA
2,408,307	Insecticide	Gertler, S. I. Haller, H. L.	USDA
2,408,389	N,N-Diethylbenzamide as an Insect Repellent.	Gertler, S. I.	USDA
2,409,987	Microspray Device	Schroeder, H. O. Lindquist, A. W.	USDA
2,411,720	Insect Repellent	Gertler, S. I.	USDA
2,412,728	Device for Producing Aerosols	Goodhue, L. D.	USDA
2,414,213	Oil-Soluble Copper-Nicotine Compounds and Process of Preparing Same.	Smith, C. R.	USDA
2,416,522	N-Alkylbenzamide and Pyrethrum Insecticides.	Gertler, S. I. Haller, H. L.	USDA
2,421,569	Insecticide	LaForge, F. B. Barthel, W. F.	USDA
2,421,570	Insecticide	LaForge, F. B.	USDA
2,424,029	Cyclopropylalkyl Ethers as Insecticides.	Haller, H. L.	USDA
2,426,349	p-Chloro-Acetophenone Semicarbazone as an Insecticide.	Gertler, S. I. Haller, H. L.	USDA
2,428,494	Pyrethrin and Dibenzyl Phthalate Insecticide.	Jones, H. A. Bushland, R. C.	USDA
2,428,844	Fly Sprays	Gertler, S. I. Haller, H. L.	USDA
2,429,818	Pyrethrin and Dialkoxyalkyl Phthalate Insecticide.	Jones, H. A. Bushland, R. C.	USDA
2,434,856	Tetrahydropyran Compound	LaForge, F. B.	USDA
2,436,478	Device for Producing Aerosols	Lindquist, A. W. Husman, C. N. Schroeder, H. O.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,436,919	Fly Sprays Comprising an N-Alkylphthalimide and DDT.	Gertler, S. I. Haller, H. L.	USDA
2,436,920	Fly Sprays Comprising an N,N-Dialkylcinnamamide and DDT.	Gertler, S. I. Haller, H. L.	USDA
2,438,988	Plural Section Distillation Column with Top Feed.	Barthel, W. F.	USDA
2,440,781	Insecticidal Fumigant Composition with Solid Rubber Carrier Particles.	Murray, C. W.	USDA
2,442,372	Method of Manufacturing Sodium Methyl Arsenate.	Miller, G. E. Seaton, S. G	Army
2,449,533	Synergistic Insecticidal Compositions.	Talley, F. B. McGovran, E. R. Mayer, E. L.	USDA
2,453,496	Process of Converting Nicotinonitrile into Nicotinamide.	Couch, J. F. Krewson, C F.	USDA
2,456,851	Alkylnicotinium Arylsulfonate Pesticide.	Woodward, C. F. Saunders, D. H. Provost, R. C.	USDA
2,463,666	Nicotinium Salts and their Production.	Woodward, C. F. Weil, L.	USDA
2,464,992	Esters of Acyloxycarboxylic Acids.	Rehberg, C. E. Fisher, C. H.	USDA
2,466,788	Fungicidal Nicotinium Salt Compositions.	Woodward, C. F. Howard, F. L. Keil, H. L. Weil, L.	USDA
2,470,160	Phenylsemioxamazide Insecticidal Compositions.	Gertler, S. I.	USDA
2,476,514	Double Salts of Nicotine	Smith, C. R.	USDA
2,478,473	Process of Recovering Nicotine from Nicotine-Bearing Plant Material.	Eskew, R. K.	USDA
2,492,692	Dioxolane Compounds	Drake, N. L. Shenk, W. J.	Army
2,498,634	Nicotinic Acid Anhydride	Badgett, C. O. Woodward, C. F.	USDA
2,512,689	Nicotine Compounds Containing Univalent Copper.	Smith, C. R.	USDA
2,518,456	Preparation of Acyloxy Carboxylic Acids from Esters of Hydroxy Carboxylic Acids.	Fein, M. L. Fisher, C. H.	USDA
2,519,319	Method of Preparing Chloranil	McBee, E. T. Newcomer, J. S.	AEC
2,524,094	Fungicidal Nicotinium Salt Composition.	Weil, L. Woodward, C. F. Howard, F. L. Keil, H. L.	USDA
2,526,648	Noncaking DDT Powder Containing Carbon Black.	Freed, W. V.	Army
2,534,255	Hydroxy Polyesters	Filachione, E. M. Fein, M. L. Fisher, C. H.	USDA
2,534,835	Nicotine Compounds Containing Univalent Copper.	Smith, C. R.	USDA
2,535,052	Insect Repellents	Drake, N. L. Eaker, C. M.	Army
2,535,089	Insect Repellents	Newman, M. S. Magerlein, B. J.	Army
2,537,021	Insect Repellents	Bartlett, P. D. Ross, S. D.	Army
2,537,022	Insect Repellents	Bartlett, P. D. Schneider, A.	Army
2,537,023	Insect Repellents	Bartlett, P. D. Schneider, A.	Army
2,541,138	Fungicidal Nicotinium Salt Compositions.	Howard, F. L. Keil, H. L. Weil, L. Woodward, C. F.	USDA
2,543,817	Photochemical Oxidation of Nicotine.	Weil, L.	USDA
2,555,330	Insect Repellents	Gates, M.	Army
2,563,832	Insect Repellents	Gates, M.	Army
2,564,663	Insect Repellents	Bartlett, P. D. Ross, S. D.	Army
2,564,664	Insect Repellents	Bartlett, P. D. Dauben, H. J.	Army
2,564,665	Insect Repellents	Bartlett, P. D. Woods, F. G.	Army
2,564,679	Insect Repellents	Drake, N. L. Weaver, W. E.	Army
2,564,685	Halogenated Terpene Addition Compounds.	Goldblatt, L. A. Oldroyd, D. M.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,564,714	Insect Repellents	Newman, M. S.	Army
2,567,199	Insect Repellent	Gates, M.	Army
2,567,200	Insect Repellent	Gates, M.	Army
2,572,852	Insect Repellent	Gates, M.	Army
2,572,864	Pine-Gum Rosin DDT Insecticide Compositions.	Sumerford, W. T. Jensen, J. A.	HEW
2,572,898	Insecticidal Composition Comprising Nicotine Sulfate and 4,4′-Dichlorodiphenyl Sulfide.	Woodward, C. F. Mayer, E. L.	USDA
2,581,342	Water-Soluble Combination Products of Gossypol and Proteins.	Altschul, A. M. Castillon, L. E.	USDA
2,581,840	Insect Repellent	Drake, N. L. Baker, C. M.	Army
2,581,841	Insect Repellent	Drake, N. L. Baker, C. M.	Army
2,581,842	Insect Repellent	Drake, N. L. Baker, C. M.	Army
2,582,949	Water-Soluble Combination Products of Gossypol and Amino Acids.	Altschul, A. M. Castillon, L. E.	USDA
2,584,105	Insect Repellents	Bartlett, P. D. Blaine, C. M.	Army
2,588,407	Insect Repellent	Newman, M. S. Magerlein, B. J.	Army
2,600,436	Method of Killing Submerged Waterweeds.	Rosenfels, R. S. Shaw, J. M. Bartley, T. R.	Int
2,605,207	Insect Repellents	Drake, N. L. Eaker, C. M. Shenk, W. J.	Army
2,605,208	Insect Repellents	Bartlett, P. D. Dauben, H. J.	Army
2,610,196	Esters of Acylated Hydroxycarboxylic Acids.	Fisher, C. H. Fein, M. L.	USDA

SUBGROUP 28–99—Chemicals and chemical products, not elsewhere classified

The following patents relate to establishments engaged in manufacturing miscellaneous chemical products not elsewhere classified, such as mucilage, household adhesives and cements, and water-treating and water-proofing compounds.

Patent No.	Title of Invention	Inventor	Agency
2,207,725	Removal of Fluorides from Drinking Water.	Elvove, E.	HEW
2,257,111	Removing Fluorides from Drinking Water.	Elvove, E.	HEW
2,297,670	Method of Protecting Boilers and the Like Against Embrittlement.	Schroeder, W. C. Berk, A. A.	Int
2,386,323	Method for Accelerating the Alkaline De-Esterification of Pectin.	Lineweaver, H. McCready, R. M.	USDA
2,399,161	Process for Producing Glues and Adhesives from Keratin Protein Materials.	Brother, G. H. Binkley, C. H.	USDA
2,401,583	Method of Sea Water Foam Suppression and Apparatus.	Redfield, A. C. Vine, A. C.	Navy
2,419,915	Apparatus for the Storage of Fluorine.	Priest, H. F. Grosse, A. V.	AEC
2,422,590	Production of Fluorine	Schumb, W. C. Stevens, A. J.	AEC
2,435,056	Method of Applying Plant Response Substances.	Schomer, H. A. Hamner, C. L.	USDA
2,454,258	Water Treatment to Prevent Embrittlement Cracking.	Schroeder, W. C. Berk, A. A.	Int
2,454,676	Adhesive Compositions	Skow, N. A. Seiler, C. J. Oriani, R. A. Whitaker, J. S.	Army
2,522,856	Removal of Salt from Sea Water	Buswell, A. M.	Navy
2,531,451	Water Purification	Maier, F. J.	HEW
2,546,162	Process for Seasoning Wood	Loughborough, W. K. McMillen, J. M. Espenas, L. D.	USDA
2,555,970	Water Purification Process	Hudson, H. E.	Army
2,602,760	Process of Protecting Metals Against Corrosion.	Michel, J. M. Hager, K. F.	Army
2,615,824	Method and Composition for Imparting Water Resistance to Textile Material.	Minor, F. W. Sookne, A. M. Harris, M. Pyle, G. L.	Army

MAJOR GROUP 29—PRODUCTS OF PETROLEUM AND COAL

The patents listed under this title relate generally to establishments refining crude petroleum and manufacturing coke and coke-oven products, paving and roofing materials, and other products made from petroleum and coal.

SUBGROUP 29–11—Petroleum refining

The following patents relate to establishments engaged in producing gasoline, fuel oils, lubricants, illuminating oils, and other products from crude petroleum and its fractionation products in petroleum refineries. Lubricating oils and greases made by blending and compounding are in Subgroup 29–92.

Patent No.	Title of Invention	Inventor	Agency
2,369,913	Apparatus for Precision Control of Flow Division for Fractionating Columns and the Like.	Palkin, S. Hall, S. A.	USDA
2,390,988	Process of Deleading Gasoline	Calingaert, G. Soroos, H. Shapiro, H.	Army
2,392,846	Method for the Removal of Tetraethyl Lead from Hydrocarbons.	Friedman, M.	Army
2,447,483	Additives for Silicone Oils	Baker, H. R. Zisman, W. A.	Navy
2,449,071	A Catalyst for the Synthesis of Hydrocarbons.	Hofer, L. J. Stern, N. R. Hawk, C. O.	Int
2,453,138	Process of Deleading Gasoline	Kharasch, M. S.	Army
2,487,788	Processing Oil Shale	Buchan, F. E.	Int
2,492,173	Flow of Thickened Fluids	Mysels, K. J.	Army
2,496,115	Stabilization of Perfluoro Oils	Burford, W. Weber, C. E.	AEC
2,504,134	Deleading of Gasoline	Kharasch, M. S.	Army
2,504,980	Ethers of 7-Hydroxyphenothiazone-3	Houston, D. F. Ernest, B. K.	USDA
2,511,833	Method for Stripping Solvents from Oils.	Beckel, A. C. Belter, P. A.	USDA
2,563,532	Spontaneous Ignition of Gasoline and Nitric Acid.	Kistiakowsky, G. B	Navy
2,566,052	Process for Photochemical Chlorination of Hydrocarbons.	Beanblossom, W. S.	AEC
2,566,065	Process for Photochemical Chlorination of Hydrocarbons.	Loverde, A. Beanblossom, W. S.	AEC
2,567,759	Fluorination of High Molecular Compounds.	Benning, A. F.	AEC
2,568,660	Fluorination Process	Rosen, R.	AEC
2,569,644	Organic Fluorine Composition and Method of Making.	Stilmar, F. B.	AEC
2,572,071	Metal Resinates and Method of Preparation.	St. Clair, W. E. Lawrence, R. V.	USDA
2,574,469	Method of Utilizing Aqueous-Organic Chemical Wastes from the Fischer-Tropsch Process.	Dressler, R. G. Bircher, R. J.	Int
2,574,619	Process for the Preparation of Fluorocarbons.	Cady, G. H.	AEC
2,585,644	Process for Producing Fluorocarbons	Fowler, R. D. Burford, W. B. Anderson, H. G.	AEC
2,588,369	Apparatus for Use in the Treatment of Oil, Gas, and Gas-Condensate Wells.	Eilerts, C. K.	Int
2,595,284	Method and Apparatus for Treatment of Gaseous Hydrocarbon Mixtures.	Mullins, P. V.	Int
2,610,952	Recovery of Liquid Fuel from Solidified Fuel.	Fischer, K. A. Hecht, O. F.	Army

SUBGROUP 29–32—Byproduct coke ovens

The following patents relate to establishments engaged in manufacturing coke, coal, gas, tar, and other products in "byproduct" coke ovens.

Patent No.	Title of Invention	Inventor	Agency
2,093,493	Making Fuel Gas	Stitzer, R. B.	TVA
2,094,027	Apparatus for Electrical Carbonization of Coal.	Stitzer, R. B.	TVA
2,127,542	Electrical Carbonization of Coal	Stitzer, R. B.	TVA

Patent No.	Title of Invention	Inventor	Agency
2,464,271	Coal Liquefaction by Hydrogenation	Storch, H. H Hirst, L. L.	Int
2,476,999	Solvation and Depolymerization of Coal.	Orchin, M	Int
2,516,141	Apparatus and Method for Gasifying Carbonaceous Material.	Newman, L. L Donavan, J. T.	Int
2,584,381	Low-Pressure Gaseous O_2 Cycle with No Chemical Air Purification.	Dodge, B. F	Navy
2,587,671	Reduction of Oxygenated Thiophene Compounds.	Wender, I Orchin, M.	Int
2,590,096	Purification of Phenanthrene by Azeotropic Distillation.	Feldman, J Orchin, M.	Int
2,593,477	Process of Underground Gasification of Coal.	Newman, L. L Schroeder, W. C.	Int

SUBGROUP 29–91—Fuel briquets and packaged fuel

The following patent relates to establishments engaged in manufacturing fuel briquets, boulets, and packaged fuel from anthracite culm, bituminous slack, charcoal, coke screenings, sawdust, or other materials, usually mixed with tar or other binders; and in manufacturing powdered fuel.

Patent No.	Title of Invention	Inventor	Agency
2,476,999	Solvation and Depolymerization of Coal.	Orchin, M	Int

SUBGROUP 29–92—Lubricating oils and greases

The following patents relate to establishments engaged in blending and compounding lubricating oils and greases.

Patent No.	Title of Invention	Inventor	Agency
2,434,978	Anticorrosion Additives for Synthetic Lubricants.	Zisman, W. A Baker, H. R.	Navy
2,457,328	1,2-Epoxides and Process for Their Preparation.	Swern, D Billen, G. N.	USDA
2,457,329	Polymers of 9,10-Epoxyoctadecanol and Process for Their Preparations.	Swern, D Billen, G. N.	USDA
2,541,190	Fluorination of Lubricating Oil	Benning, A. F	AEC
2,591,777	Process of Forming a Machining Lubricant upon Molybdenum.	Bowen, D. B	Navy

MAJOR GROUP 30—RUBBER PRODUCTS

The patents listed under this title relate generally to establishments manufacturing from natural or synthetic rubber, gutta percha, balata, all kinds of rubber products such as tires, rubber footwear, mechanical rubber goods, and rubber sundries. This group also includes establishments manufacturing reclaimed rubber or rebuilt and retreated rubber tires.

SUBGROUP 30–11—Tires and inner tubes

The following patents relate to establishments engaged in manufacturing pneumatic casings, inner tubes, and solid and cushion tires for all types of vehicles.

Patent No.	Title of Invention	Invento	Agency
2,444,064	Method of Treating Tire Cord	Philipp, H. J	USDA
2,449,215	Method of Producing Cotton Cordage.	Goldthwait, C. F Smith, H. O.	USDA

SUBGROUP 30–31—Reclaimed rubber

The following patent relates to establishments engaged in reclaiming rubber from used tires, scrap, and miscellaneous waste rubber by manufacturing processes which result in a product that is sold for mixing with crude rubber and artificial rubber as an extender.

Patent No.	Title of Invention	Inventor	Agency
2,610,925	Rubber Reclaiming Oil	Staten, F. W	Int

SUBGROUP 30–41—Industrial and mechanical rubber products

The following patents relate to establishments engaged in manufacturing industrial and mechanical rubber goods, rubberized fabrics and vulcanized rubber clothing, and miscellaneous rubber specialties and sundries. The rebuilding and retreading of tires is included in this subgroup.

Patent No.	Title of Invention	Inventor	Agency
2,221,794	Forming Ceramic Ware	Gould, R. E. Deaderick, D. A.	TVA
2,234,927	Link for Endless Traction Belts	Kubaugh, L. M.	Army
2,384, 476	Antivibration or Shock Absorber Mount.	Lane, D. L.	Army
2,390,996	Process for the Coagulation of Castilloa Latex.	Ford, T. F.	USDA
2,393,005	Ear Protector	Veneklasen P. S.	Army
2,393,035	Process for Recovering Rubber from Fleshy Plants.	Eskew, R. K. Edwards, P. W.	USDA
2,395,998	Battery Removing Tool	Falk, G. E.	Navy
2,399,156	Treatment of Rubber	Hanslick, R. S. Stamberger, P. Eskew, R. K.	USDA
2,405,614	Moistureproofing Device	Shriro, M. A.	Army
2,408,853	Guayule Rubber by Fermentation	Hoover, S. R. Allen, P. J. Naghski, J.	USDA
2,411,033	Process for the Coagulation of Castilloa Latex.	Ford, T. F.	USDA
2,420,788	Compounding of Rubber	McKennon, F. L. Lindquist, J. R.	USDA
2,423,842	Protective Covering for Bonded Wire Electric Strain Gages.	McHenry, D.	Int
2,434,412	Recovering Rubber from Guayule Shrub.	Jones, E. P.	USDA
2,439,394	Grommet Insulating Bushing Unit	Lanzalotti, S. J. Skobel, M.	Army
2,440,554	Process for the Recovery of Rubber inPlants by Fermenting with Clostridium.	Naghski, J. White, J. W. Hoover, S. R.	USDA
2,440,781	Insecticidal Fumigant Composition with Solid Rubber Carrier Particles.	Murray, C. W.	USDA
2,449,215	Method of Producing Cotton Cordage.	Goldthwait, C. F. Smith, H. O.	USDA
2,465,985	Noise Shield for Handsets	Veneklasen, P. S.	Army
2,468,721	Earphone Socket and Noise Shield	Volkmann, J.	Army
2,475,141	Process of Concentrating Aqueous Rubber Dispersion Centrifuging.	Jones, E. P.	USDA
2,509,513	Synthetic Rubberlike Materials	Mast, W. C. Fisher, C. H.	USDA
2,530,105	Method of Making a Diver's Combined Hose and Electrical Communication Line Cable.	Wallace, R. L.	Army
2,572,046	Process for Recovering Parthenyl Cinnamate and Essential Oils from Guayule Resin.	Meeks, J. W. Banigan, T. F. Planck, R. W.	USDA

MAJOR GROUP 31—LEATHER AND LEATHER PRODUCTS

The patents listed under this title relate generally to establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products.

SUBGROUP 31–11—Leather tanning and finishing

The following patents relate to establishments engaged in tanning, currying, and finishing sole and belting leathers, upper and lining leathers, and miscellaneous specialty leathers, and in embossing, japanning, and currying leather.

Patent No.	Title of Invention	Inventor	Agency
2,458,953	Apparatus and Method for Determining the Scuff Resistance of Leather.	Mann, C. W.	USDA
2,505,818	Solubilizing Tanning Bark Extract with Waste Sulfite Liquors.	Williams, K. T. Potter, E. F.	USDA

SUBGROUP 31–61—Suitcases, briefcases, bags, trunks, and other luggage

The following patent relates to establishments engaged in manufacturing suitcases, briefcases, bags, trunks, and related luggage of leather and other materials.

Patent No.	Title of Invention	Inventor	Agency
2,602,252	Portable Exhibiting Device	Shinn, C. C.	HEW

MAJOR GROUP 32—STONE, CLAY, AND GLASS PRODUCTS

The patents listed under this title relate generally to establishments engaged in manufacturing glass, cement, clay, pottery, concrete, gypsum, cut-stone, abrasive and asbestos products.

SUBGROUP 32–31—Glass products

The following patents relate to establishments engaged in manufacturing glass and glass products. Optical lenses are classified in Subgroup 38–31.

Patent No.	Title of Invention	Inventor	Agency
2,399,696	Combination Sunlight or Artificial Heat Dehydrator and Hotbed.	Schreiber, W. T.	USDA
2,504,982	Signaling Mirror	Hunter, R. S.	Com

SUBGROUP 32–41—Hydraulic cement

The following patent relates to establishments engaged in manufacturing portland, natural, masonry, and puzzolan cements.

Patent No.	Title of Invention	Inventor	Agency
2,601,274	Mucic Acid Retarded Portland Cement.	Glantz, O. J. Oborn, E. T.	Int

SUBGROUP 32–53—Floor and wall tile

The following patents relate to establishments engaged in manufacturing ceramic tile, mosaic tile, glazed and enameled tile, including faience and other types of ceramic floor and wall tile.

Patent No.	Title of Invention	Inventor	Agency
2,475,469	Ceramic Coating for Metals	Bennett, D. G. Andrews, C. M.	AF
2,475,470	Ceramic Coating Material	Bennett, D. G. Andrews, C. M.	AF

SUBGROUP 32–55—Clay refractories

The following patents relate to establishments engaged in manufacturing firebrick, crucibles, and other heat-resisting clay products

such as glass-house tank blocks, stoppers, floaters, and rings. Non-clay refractories are classified in Subgroup 32–97.

Patent No.	Title of Invention	Inventor	Agency
2,289,383	Calcium Oxide-Chromium Oxide-Aluminum Oxide Refractory.	Pole, G. R.	TVA
2,528,536	Crucible Holder	Meyrowitz, R.	Int

SUBGROUP 32–63—Fine earthenware (whiteware) table and kitchen articles

The following patents relate to establishments engaged in manufacturing fine (semi-vitreous) types of earthenware table and kitchen articles for preparing, serving, or storing food or drink.

Patent No.	Title of Invention	Inventor	Agency
2,063,953	Glazed Ceramic Ware and Method of Making.	Pole, G. R.	TVA
2,080,418	Apparatus for Making Ceramic Articles.	Gould, R. E.	TVA
2,143,003	Making Ceramic Articles	Gould, R. E.	TVA
2,173,107	Making Ceramic Articles	Gould, R. E.	TVA
2,201,989	Ceramic Support	Davis, A. L.	TVA
2,221,794	Forming Ceramic Ware	Gould, R. E. Deaderick, D. A.	TVA
2,231,033	Ceramic Support	Smith, W. F.	TVA
2,233,434	Ceramic Support	Smith, W. F.	TVA
2,273,859	Making Ceramic Articles	Gould, R. E.	TVA

SUBGROUP 32–71—Concrete products

The following patents relate to establishments engaged in manufacturing concrete building blocks and shapes, pipe and conduit, and similar products such as poles, piling, septic tanks, garbage boxes, garden furniture, incinerators, and vaults made from a combination of stone or gravel, sand, and cement.

Patent No.	Title of Invention	Inventor	Agency
2,197,885	Means and Method for Conditioning Manure and Controlling Insect Pests.	Brodie, D. A.	HEW
2,329,223	Substratum Water Control	Schmidt, L. A.	TVA
2,493,763	Method of Producing Lightweight Aggregate from Clay.	Klinefelter, T. A.	Int

SUBGROUP 32–92—Asbestos products

The following patent relates to establishments engaged in manufacturing commodities composed wholly or chiefly of asbestos. Steam and other packing, pipe and boiler covering, and gaskets are classified in Subgroup 32–93.

Patent No.	Title of Invention	Inventor	Agency
2,390,525	Molding Process and Product Thereof	Egan, C. W.	Army

SUBGROUP 32–93—Steam and other packing, and pipe and boiler covering

The following patents relate to establishments engaged in manufacturing packing for steam, water, and other pipe joints, and for engines, air compressors, etc.; and insulating materials for covering boilers and pipes; and gaskets.

Patent No.	Title of Invention	Inventor	Agency
2,446,251	Joint Fillers	Stricklin, T. W.	AEC
2,463,563	Gasket Forming Machine	Robinson, J.	Army
2,528,436	Stuffing Box and Expansion Joint	Johnson, M. E.	AEC
2,532,891	Flanged Joint Sealing Gasket	Chupp, W. W.	AEC

SUBGROUP 32–95—Treated minerals and earths

The following patents relate to establishments engaged in grinding, pulverizing, or otherwise treating certain earths, rocks, or minerals, such as barytes, borax, chalk, clays, cornwall stone, feldspar, kaolin, mica, pumice, quartz, silica, and talc. Crushing or grinding slag is also included in this subgroup.

Patent No.	Title of Inventions	Inventor	Agency
2,067,538	Process for Making Double or Treble (Calcium) Superphosphate.	MacIntire, W. H.	TVA
2,070,582	Making Superphosphate	Curtis, H. A.	TVA

Patent No.	Title of Invention	Inventor	Agency
2,072,980	Manufacture of Granular Calcium Phosphates.	Curtis, H. A.	TVA
2,072,981	Producing Phosphorus	Curtis, H. A.	TVA
2,093,460	Making Manganese Phosphate Fertilizer.	MacIntire, W. H.	TVA
2,093,461	Making Manganese Phosphate	MacIntire, W. H.	TVA
2,095,993	Manganese Phosphate Fertilizer	MacIntire, W. H.	TVA
2,095,994	Making Tri-Calcium Phosphate	MacIntire, W. H.	TVA
2,185,224	Purification of Rock Minerals	Ralston, O. C.	Int
2,288,610	Treatment of Ores	Dean, R. S.	Int
2,297,689	Separation of Feldspar from Quartz	O'Meara, R. G.	Int
2,363,029	Treatment of Magnesite Ores	Weinig, A. J.	Navy
2,363,030	Flotation of Magnesite	Weinig, A. J.	Navy
2,363,031	Froth Flotation Treatment of Low Grade Magnesite Ores.	Weinig, A. J.	Navy
2,363,104	Magnesite Ore Treatment	Weinig, A. J.	Navy
2,373,123	Flotation of Magnesite	Lefforge, J. W.	TVA
2,380,406	Production of Low Sulphur Sponge Iron.	Buehl, R. C.	Int
2,393,008	Ore Concentration	Woodward, H. S. Bates, W. R.	Navy
2,407,651	Concentrating Fluorspar by Froth Flotation.	Clemmer, J. B. Clemmons, B. H.	Int
2,410,043	Process for Manufacturing Calcium Fluoride.	Breton, E. J. Waggaman, W. H.	Int
2,412,217	Froth Flotation of Chromite with Fluoride.	Havens, R.	Int
2,414,815	Beneficiation of Beryllium Ores	Kennedy, J. S. O'Meara, R. G.	Int
2,415,416	Froth Flotation of Silica from Iron Ore with Anionic Collector.	Clemmer, J. B. Williams, M. F.	Int
2,419,945	Froth Flotation of Silica from Iron Ore.	Clemmer, J. B. Williams, M. F.	Int
2,424,552	Froth Flotation of Nonmetallic Minerals.	Clemmer, J. B. Rampacek, C.	Int
2,436,520	Grain Refining Magnesium Alloys	Mahoney, C. H. Lee, H. C. Tarr, A. L. LeGrand, P. E.	Navy
2,446,780	Method of Preparing Uranium Hydride.	Newton, A. S.	AEC
2,448,993	Grain Refining Magnesium Alloys	Mahoney, C. H. Lee, H. C. Tarr, A. L. LeGrand, P. E.	Navy
2,459,203	Production of Shaped Articles from Fluorite.	Vahrenkamp, G. J.	Int
2,469,413	Process for Preparing Barium Aluminate.	Roller, P. S.	Int
2,476,979	Process for Preparing Alumina for Clays and Other Silicates of Aluminum.	Hoeman, E. C.	Int
2,497,863	Method of Concentrating Fluorspar Ores.	Clemmer, J. B. Clemmons, B. H.	Int
2,506,945	Treatment of Pitchblende Ores	Thomas, H. C. Tomcufcik, A. S.	AEC
2,519,361	Production of Magnesium Carbonate or Magnesium Oxide Containing Little or No. Calcium.	Evans, R. L.	Int
2,519,792	Electrolytic Production of Metallic Uranium.	Rosen, R.	AEC
2,524,739	Process for the Production of Ceramic Articles.	Stone, R. L.	Com
2,532,490	Process for Recovery of C^{14} Activities	Fries, B. A.	AEC
2,535,042	Preparation of Iron Carbides	Cohn, E. M. Hofer, L. E.	Int
2,547,336	Grinding Mica	McDaniel, W. T. LeGrand, J. R.	TVA
2,590,901	Production of Lightweight Aggregate from Molten Slag.	Stinson, J. M. Stinson, F. Stout, E. L. Scott, W. C.	TVA
2,590,902	Production of Lightweight Aggregate from Molten Slag.	Stinson, J. M. Stinson, F. Scott, W. C. Stout, E. L.	TVA

Patent No.	Title of Invention	Inventor	Agency
2,593,431	Reagent Conditioning for Electrostatic Separation of Minerals.	Fraas, F	Int
2,601,257	Continuous Process for Thermal Extraction of Oil Shale.	Buchan, F. E	Int

SUBGROUP 32–97—Nonclay refractories

The following patents relate to establishments engaged in manufacturing refractories and crucibles made of materials other than clay. Clay refractories and crucibles are classified in Subgroup 32–55.

Patent No.	Title of Inventions	Inventor	Agency
2,231,024	Calcium Oxide-Chromium Oxide Refractory.	Pole, G. R	TVA
2,231,944	Calcium Oxide-Chromium Oxide-Zirconium Oxide Refractory.	Pole, G. R	TVA
2,231,945	Calcium Oxide-Zirconium Oxide Refractory.	Pole, G. R	TVA
2,289,383	Calcium Oxide-Chromium Oxide-Aluminum Oxide Refractory.	Pole, G. R	TVA
2,413,709	Method of Recovering Alumina and Hydrochloric Acid.	Hoffman, J. D	Com
2,469,418	Producing Silicon	Striplin, M. M	TVA
2,472,456	Crucible and Method of Making Crucibles.	Anicetti, R. J	AEC
2,521,495	Carbonaceous Articles and Production Thereof.	Wilhelm, H. A Gerald, P. S.	AEC
2,528,536	Crucible Holder	Meyrowitz, R	Int

MAJOR GROUP 33—PRIMARY METAL INDUSTRIES

The patents listed under this title relate generally to establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; and in the manufacture of castings, forgings, and other basic products of ferrous and nonferrous metals.

SUBGROUP 33–11—Blast furnaces

The following patents relate to blast furnaces engaged in manufacturing pig iron and blast-furnace ferro-alloys from iron ore and scrap. Patents regarding establishments engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes are classified in Subgroup 33–13.

Patent No.	Title of Invention	Inventor	Agency
2,173,103	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H	TVA
2,462,900	Reduction Accelerator for the Sponge Iron Rotary Kiln Process.	Riott, J. P	Int
2,495,225	Method for the Production of Low Sulfur Sponge Iron.	Buehl, R. C Riott, J. P. Shoub, E. P.	Int
2,558,698	Electromagnetic Pump	Wade, E. J	AEC
2,603,423	Method for the Removal of Sulfur from Sponge Iron.	Buehl, R. C	Int

SUBGROUP 33–12—Steel works and rolling mills

The following patent relates to establishments engaged in converting pig iron, scrap iron, and scrap steel into steel, and in hot-rolling iron and steel into basic shapes such as plates, sheets, strips, rods, bars, and tubing.

Patent No.	Title of Invention	Inventor	Agency
2,494,267	Surface Hardening of Ferrous Metals	Schlesinger, H. I. Schaeffer, G. W.	AEC

SUBGROUP 33–13—Electrometallurgical products

The following patents relate to establishments engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes, including high-percentage ferro-alloys such as ferro-

manganese, ferrochromium, ferrovanadium, and ferrotitanium, and high-percentage nonferrous additive alloys.

Patent No.	Title of Invention	Inventor	Agency
2,119,560	Electrolytic Process for the Extraction of Metallic Manganese.	Shelton, S. M.	Int
2,133,289	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H.	TVA
2,133,290	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H.	TVA
2,169,540	Purification of Manganese Sulfate Solutions.	Shelton, S. M.	Int
2,173,103	Anodic Oxidation of Ferro-Phosphorus.	Fraser, L. H.	TVA
2,231,944	Calcium Oxide-Chromium Oxide-Zirconium Oxide Refractory.	Pole, G. R.	TVA
2,231,945	Calcium Oxide-Zirconium Oxide Refractory.	Pole, G. R.	TVA
2,289,365	Iron-Phosphorus-Silicon Alloy	Jerabek, H. S.	TVA
2,436,520	Grain Refining Magnesium Alloys	Mahoney, C. H. Lee, H. C. Tarr, A. L. LeGrand, P. E.	Navy
2,448,993	Grain Refining Magnesium Alloys	Mahoney, C. H. Lee, H. C. Tarr, A. L. LeGrand, P. E.	Navy
2,514,283	Electrolysis of Light Metals	Lawson, R. K. Hendrickson, H. R. McClintock, W. O. Woodman, F. W.	Navy

SUBGROUP 33–21—Gray-iron foundries

The following patent relates to foundries engaged in manufacturing gray-iron castings, including cast gray-iron pipe and fittings.

Patent No.	Title of Invention	Inventor	Agency
2,383,467	Flotation of Iron Ores	Clemmer, J. B. Clemmons, B. H.	Int

SUBGROUP 33–34—Primary refining of aluminum

The following patents relate to establishments engaged in producing aluminum from the ore or from alumina, and in refining aluminum by any process. Important products of this subgroup include aluminum blocks, slabs, pigs, or ingots. Processes for rolling, drawing, or alloying primary aluminum are classified in Subgroup 33–52.

Patent No.	Title of Invention	Inventor	Agency
2,359,340	Process of Purifying Aluminum Sulphate Solution.	Walthall, J. H.	TVA
2,381,477	Production of Alumina	Walthall, J. H.	TVA
2,413,709	Method of Recovering Alumina and Hydrochloric Acid.	Hoffman, J. D.	Com
2,464,267	Dehydrating Alumina in the Production of Aluminum.	Short, A. M.	Int
2,476,979	Process for Preparing Alumina from Clays and Other Silicates of Aluminum.	Hoeman, E. C.	Int
2,519,362	Method of Reducing the Concentration of Silica in Sodium Aluminate Solutions.	Flint, E. P. Shartsis, L. Wells, L. S.	Com

SUBGROUP 33–35—Primary refining of magnesium

The following patents relate to establishments engaged in producing magnesium from ore or brine, and in refining magnesium by any process. Important products of this subgroup include magnesium blocks, slabs, pigs, or ingots. Processes for rolling, drawing, or alloying primary magnesium are classified in Subgroup 33–59.

Patent No.	Title of Invention	Inventor	Agency
2,353,193	Recovery of Metallic Magnesium	Sayers, R. R.	Int
2,399,634	Handling Molten Magnesium	Holland, W. D. Berry, C. W. McClintock, W. O.	Navy
2,408,466	Melting Magnesium Metal and the Like.	Lyons, E. C.	Navy
2,408,467	Conditioning Molten Metal	Lyons, E. C.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,436,520	Grain Refining Magnesium Alloys	Mahoney, C. H. Lee, H. C. Tarr, A. L. LeGrand, P. E.	Navy
2,448,993	Grain Refining Magnesium Alloys	Mahoney, C. H. Lee, H. C. Tarr, A. L. LeGrand, P. E.	Navy
2,514,275	Apparatus for Condensing Metal Vapors.	Allen, C. H.	Navy
2,549,798	Production of Magnesium Chloride from Magnesium Silicate Ore.	Gee, E. A. Pawel, M. T.	Int
2,550,708	Removal of Silica from Alkaline Carbonate Brines.	Meyer, E. G.	Int
2,571,965	Process for Production of Radioactive Iron.	Swartout, J. A.	AEC

SUBGROUP 33–39—Primary smelting and refining of nonferrous metals, not elsewhere classified.

The following patents relate to establishments engaged in smelting and refining nonferrous metals, not elsewhere classified, including gold, silver, platinum, iridium, cobalt, nickel, tin, and antimony. Processes for rolling, drawing, and alloying these nonferrous primary metals are classified in Subgroup 33–59.

Patent No.	Title of Invention	Inventor	Agency
2,231,024	Calcium Oxide-Chromium Oxide Refractory.	Pole, G. R.	TVA
2,395,475	Beneficiation of Beryllium Ores	Gibbs, H. L. Snedden, H. D.	Int
2,412,217	Froth Flotation of Chromite with Fluoride.	Havens, R.	Int
2,476,284	Cobalt Solution Purification	Churchward, R. E. Shelton, F. K.	Int
2,508,427	Ore Separation	Shelton, F. K.	Int
2,526,707	Process for the Production of a Cobalt Salt from Arseniferous Ores.	Stahl, J. C. Shelton, F. K.	Int
2,532,284	Cobalt Plating by Chemical Reduction.	Brenner, A. Riddell, G. E.	Com
2,535,572	Preparation of UF_6	Hainer, R. M.	AEC
2,548,897	Process of Melting Hafnium, Zirconium and Titanium Metals.	Kroll, W. J.	Int
2,561,526	Oxide Production of Pure Ductile Vanadium from Vanadium Oxide.	Gray, J. E. Seybolt, A. U. McKechnie, R. K.	AEC
2,577,739	Purification of Cobalt Sulfate Solution.	Churchward, R. E. Shelton, F. K.	Int
2,579,531	Process for Extracting Gold and Silver.	Zadra, J. B.	Int
2,601,306	Method for Dissolution of Chromium from Chromite Ores.	Lloyd, R. R. Rawles, W. T.	Int

SUBGROUP 33–41—Secondary smelting and refining of nonferrous metals and alloys.

The following patents relate to establishments engaged in recovering nonferrous metals and alloys from new and used scrap and dross. This subgroup includes the recovery and alloying of precious metals, but does not include alloying primary aluminum (Subgroup 33–52), or other nonferrous primary metals (Subgroup 33–59).

Patent No.	Title of Invention	Inventor	Agency
2,532,283	Nickel Plating by Chemical Reduction.	Brenner, A. Riddell, G. E.	Com
2,601,306	Method for Dissolution of Chromium from Chromite Ores.	Lloyd, R. R. Rawles, W. T.	Int
2,603,388	Rotary Discharge Element for Hoppers, Having Helical Pockets and an Axially Slidable Shield for Adjustably Occluding Said Pockets.	Bryant, E. E.	Army

SUBGROUP 33–51—Rolling, drawing, and alloying of copper.

The following patents relate to establishments engaged in rolling, drawing, and extruding copper, brass, bronze, and other copper-base alloy basic shapes such as plates, sheets, strips, rods, wire and tubing. Primary copper alloys are classified in this subgroup. Patents for drawing wire from copper and copper-base alloy rods are classified in Subgroup 33–92.

Patent No.	Title of Invention	Inventor	Agency
2,165,316	Electrical Resistance Element, Alloy, and Production Thereof.	Thomas, J. L.	Com
2,616,800	Method of Making Cupro-Titanium	Wartman, F. S.	Int

SUBGROUP 33–52—Rolling, drawing, and alloying of aluminum.

The following patent relates to establishments engaged in rolling, drawing, and extruding aluminum and aluminum-base alloy basic shapes. Aluminum alloys are included in this subgroup.

Patent No.	Title of Invention	Inventor	Agency
2,488,568	Production of Aluminum-Silicon Alloys.	Striplin, M. M. Kelly, W. M.	TVA

SUBGROUP 33–59—Rolling, drawing, and alloying of nonferrous metals, not elsewhere classified.

The following patents relate to establishments engaged in rolling, drawing, and alloying nonferrous metals other than copper (Subgroup 33–51), and aluminum (Subgroup 33–52). The products of this subgroup are produced in the form of basic shapes such as sheets, strips, bars, rods, wire and tubing. Important alloys include monel metal, white metal, antifriction metal, babbit metal, type metal, solder, and alloys of gold, silver, platinum, magnesium, rare-earth, and other nonferrous metals.

Patent No.	Title of Invention	Inventor	Agency
2,474,538	Alloying Manganese with Magnesium.	Mahoney, C. H. Lee, L. G.	Navy
2,496,564	Low Melting Point Silver Solder	Soller, W. Kraus, G.	AF
2,522,537	Dithionate Process for Production of Zinc Hydroxide from Zinc Oxidized Ores.	Ravitz, S. F. Back, A. E.	Int
2,534,676	Preparation of Compounds of Uranium and Nonmetals.	Newton, A. Johnson, O.	AEC
2,556,921	Gold Beryllium Alloy and Method of Making Same.	Hirsch, H. Kowalchik, M.	AEC
2,564,241	Extraction Process for Cerium	Warf, J. C.	AEC
2,588,450	Process of Regenerating Activated Carbon Loaded with Absorbed Gold.	Zadra, J. B.	Int
2,595,924	Quaternary Bismuth Alloy	Carlson, O. N. Wilhelm, H. A.	AEC
2,595,925	Quaternary Bismuth Alloy	Carlson, O. N. Wilhelm, H. A.	AEC

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SUBGROUP 33–61—Nonferrous foundries

The following patents relate to foundries engaged in manufacturing castings and die castings of aluminum, brass, bronze, and other nonferrous metals and alloys.

Patent No.	Title of Invention	Inventor	Agency
2,495,276	Process for Making Multipiece Molds	Milton, C. L.	Army
2,588,734	Pretreatment of Beryllium Prior to Coating.	Kolodney, M.	AEC

SUBGROUP 33–92—Wire drawing

The following patents relate to establishments engaged in drawing wire from iron, steel, or nonferrous metal rods or bars.

Patent No.	Title of Invention	Inventor	Agency
2,042,971	Method of Making Electrical Resistance Elements and Alloys Therefor.	Thomas, J. L.	Com
2,042,972	Electrical Resistance Element and Alloy Therefor.	Thomas, J. L.	Com
2,435,788	Control of Reflection in Transmission Lines.	Lawson, J. L.	Navy

SUBGROUP 33–99—Primary metal industries, not elsewhere classified

The following patents relate to establishments engaged in manufacturing flat bright cold-rolled strip (including razor-blade strip), cold-rolled sheets, cold-finished steel bars, nonferrous forgings, ferrous and nonferrous flakes and powders, and other primary metal products, not elsewhere classified. Annealing and heat treating steel are also included in this subgroup.

Patent No.	Title of Invention	Inventor	Agency
2,421,537	Electrical Resistance Annealing Device for Wire.	Boyers, J. S.	Navy
2,494,267	Surface Hardening of Ferrous Metals.	Schlesinger, H. I. Schaeffer, G. W.	AEC
2,545,441	Method for Forming Glomerules	Barrett, E. P.	Int
2,586,027	Casting Apparatus	Gray, C. F.	AEC
2,621,912	Receptacle	Smetana, F. J. Lyons, R. N. Bankoff, S. G.	AEC

MAJOR GROUP 34—FABRICATED METAL PRODUCTS (EXCEPT ORDNANCE, MACHINERY, AND TRANSPORTATION EQUIPMENT)

The patents listed under this title relate generally to establishments engaged in fabricating ferrous and nonferrous metal products such as tin cans and other tinware, hand tools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal stampings, lighting fixtures, fabricated wire products, and a variety of metal products not elsewhere classified. Certain important segments of the metal fabricating industries are classified in other major groups such as ordnance in Major Group 19; machinery in Major Groups 35 and 36; transportation equipment in Major Group 37; and professional, scientific, and controlling instruments, watches and clocks in Major Group 38. The production of basic ferrous and nonferrous metals and their alloys is classified in Major Group 33.

SUBGROUP 34–11—Tin cans and other tinware

The following patents relate to establishments engaged in manufacturing packers' cans, beer cans, general-line cans, oil containers, milk and ice-cream cans, and other tinware.

Patent No.	Title of Invention	Inventor	Agency
2,412,728	Device for Producing Aerosols	Goodhue, L. D.	USDA
2,436,478	Device for Producing Aerosols	Lindquist, A. W. Husman, C. N. Schroeder, H. O.	USDA
2,478,172	Packaging and Supporting Sleeve	Sanderson, W. J. Westover, B. J.	USDA
2,518,450	Cushioned Package of Fragile Articles.	Cowen, S. T. Shriro, M. A.	Army
2,621,912	Receptacle	Smetana, F. J. Lyon, R. N. Bankoff, S. G.	AEC

SUBGROUP 34–22—Edge tools

The following patents relate to establishments engaged in manufacturing all kinds of edge tools, such as scythes, axes, planes, chisels, drawknives; and cutting dies for use in cutting cloth, paper, and leather. Metal-cutting dies are classified in Subgroup 35–43.

Patent No.	Title of Invention	Inventor	Agency
2,434,869	Bark Chipping Hack for Turpentining Trees.	Snow, A. G. Lanier, H. R.	USDA
2,553,316	Wire Stripper for Stripping Outer Conductor from Coaxial Wire.	Helminak, J. E.	Navy
2,584,049	Can Opener	Reinecke, K. O.	Army

SUBGROUP 34–23—Hand tools

The following patents relate to establishments engaged in manufacturing hand tools, such as hammers, wrenches, pliers, screw drivers, shovels, rakes, and a variety of special tools used by repairmen, jewelers, stone-cutters and ironworkers. Edge tools are classified in Subgroup 34–22, and power-driven hand tools in Major Group 35.

Patent No.	Title of Invention	Inventor	Agency
2,364,630	Assembly Tool	Gilligan, C. W.	Army
2,395,998	Battery Removing Tool	Falk, G. E.	Navy
2,444,457	Metal Lens Holder	Marks, G. W. Cossey, F. Mills, R. S.	Int
2,474,463	Wiring Pencil	Burrell, E.	Navy
2,485,954	Staking Tool	Burrell, E.	Navy
2,595,134	Universal Manipulator for Grasping Tools.	Gordon, C. M.	AEC
2,608,900	Cartridge Belt Assembly Tool	Kunz, W. R.	Army

SUBGROUP 34–29—Hardware, not elsewhere classified

The following patents relate to establishments engaged in manufacturing miscellaneous "hardware". Bolts and nuts are classified in Subgroup 34–94, and hand tools in Subgroup 34–23.

Patent No.	Title of Invention	Inventor	Agency
2,443,629	Releasable Connecting Mechanism	Matuszewski, M	Army
2,472,939	Crate having Lifting Means	Connolly, C. A	USDA
2,485,921	Explosive Operated Latch Mechanism	Rockwell, G. O	Navy
2,581,416	Spring Shock and Vibration Isolator	Irby, J. W	Army
2,601,232	Cover Retaining Mechanism	Sohn, W. H Lindemann, H. B.	Navy

SUBGROUP 34–31—Sanitary ware and other plumbers' supplies

The following patent relates to establishments engaged in manufacturing sanitary ware such as sinks; and plumbers' fittings such as faucets, spigots, steam and water traps. Steam or water line valves are classified in Subgroup 35–91.

Patent No.	Title of Invention	Inventor	Agency
2,303,417	Steam Trap	Worthington, J. A	TVA

SUBGROUP 34–39—Heating and cooking apparatus (except electric)

The following patents relate to establishments engaged in manufacturing heating and cooking equipment such as stoves, water heaters, furnaces, radiators, and cafeteria food warming equipment. Electric heating equipment is classified in Subgroup 36–21.

Patent No.	Title of Invention	Inventor	Agency
2,283,954	Apparatus for Testing the Embrittlement Cracking Characteristics of Solutions.	Schroeder, W. C Berk, A. A.	Int
2,283,955	Means for and Method of Testing Embrittlement Cracking Characteristic of Solutions.	Schroeder, W. C	Int
2,337,034	Heat Treating Vegetable Material	Davis, A. L	TVA
2,339,254	Warm Air Furnace	Dill, R. S	Com
2,355,080	Burner	Junkins, J. N	TVA
2,361,151	Cooker and Dehydrator	Reed, J. O	USDA
2,404,015	Liquid Fuel Burner	Walker, B	Army
2,424,844	System for Heating Liquids	Parry, V. F	Int
2,438,123	Charging Seal for Stoves	Lambert, R. D Bailey, C. L.	TVA
2,445,115	Heat Exchanger	Hanrahan, F. P	USDA
2,445,350	Multiple Effect Solar Still	Ginnings, D. C	Com
2,448,412	Heater, Stove and Burner Particularly Adapted for Use in Making Field Laboratory Tests.	Bent, H. E	Army
2,454,258	Water Treatment to Prevent Embrittlement Cracking.	Schroeder, W. C Berk, A. A.	Int
2,502,434	Stove	Creitz, E. C	Com
2,514,116	Induction Reamer	Baker, W. R	AEC
2,532,322	Phosphorous Combustion Furnace	McFarlin, C. J	TVA

SUBGROUP 34–41—Fabricated structural steel and ornamental metal work

The following patents relate to establishments engaged in manufacturing fabricated iron and steel or other metal for structural purposes, and architectural ornamental work of ferrous and nonferrous metals. Important products of this subgroup include structural steel shapes, stairs and staircases, fire escapes, grilles, railings, fences and posts, and portable metal buildings.

Patent No.	Title of Invention	Inventor	Agency
2,345,621	Withe for Masts, Flagpoles, and the Like.	Mothershead, R. E	Com
2,365,233	Interlocking Grating Panel	Wilson, C. N	Army
2,424,219	Screen	Black, E. A	Army
2,510,059	Platform	Black, E. A	Army

SUBGROUP 34–43—Boiler shop products

The following patents relate to establishments engaged in manufacturing industrial, power, and marine boilers, smoke stacks, heavy tanks, and other boiler shop products; and fabricated plate work which involves the cutting, punching, bending, and shaping of steel plates. Domestic heating and cooking apparatus are classified in Subgroup 34–39.

Patent No.	Title of Invention	Inventor	Agency
2,283,954	Apparatus for Testing the Embrittlement Cracking Characteristics of Solutions.	Berk, A. A Schroeder, W. C.	Int
2,283,955	Means for and Method of Testing Embrittlement Cracking Characteristics of Solutions.	Schroeder, W. C	Int
2,297,670	Method of Protecting Boilers and the Like Against Embrittlement.	Schroeder, W. C Berk, A. A.	Int
2,356,798	Apparatus for Melting and Processing Crude Oleoresin.	Reed, J. O	USDA
2,369,913	Apparatus for Precision Control of Flow Division for Fractionating Columns and the Like.	Palkin, S Hall, S. A.	USDA
2,454,258	Water Treatment to Prevent Embrittlement Cracking.	Schroeder, W. C Berk, A. A.	Int
2,514,116	Induction Reamer	Baker, W. R	AEC
2,530,376	Vacuum Distillation	Castle, F. J Beal, R. E.	USDA

SUBGROUP 34–61—Vitreous-enameled products

The following patents relate to establishments engaged in manufacturing vitreous-enameled kitchen, household, and hospital utensils; table tops; refrigerator, stove and washing machine parts; etc.

Patent No.	Title of Invention	Inventor	Agency
2,475,469	Ceramic Coating for Metals	Bennett, D. G Andrews, C. M.	AF
2,475,470	Ceramic Coating Material	Bennett, D. G Andrews, C. M.	AF
2,599,951	Rotary Spark Gap	Stanton, R. S	Navy

SUBGROUP 34–64—Powder metallurgy

The following patents relate to establishments engaged in manufacturing small machine parts by powder metallurgy, involving the mixing, molding, pressing, and sintering of metallic powders.

Patent No.	Title of Invention	Inventor	Agency
2,385,819	Beneficiation of Beryllium Ores	Lamb, F. D Banning, L.	Int
2,435,227	Method and Apparatus for Producing Articles from Powdered Materials.	Lester, H. H	Army
2,440,999	Compressed Neutron Source	Anderson, H. L	AEC
2,442,372	Method of Manufacturing Sodium Methyl Arsenate.	Miller, G. E Seaton, S. G.	Army
2,448,479	Uranium Monocarbide and Method of Preparation.	Wilhelm, H. A Daane, A. H.	AEC
2,452,139	Method of Preparing Uranium Deuteride.	Newton, A. S	AEC
2,459,203	Production of Shaped Articles from Fluorite.	Vahrenkamp, G. J	Int
2,491,320	Neutron Detectors and Method of Making Same.	Koontz, P. G	AEC
2,521,495	Carbonaceous Articles and Production Thereof.	Wilhelm, H. A Gerald, P. S.	AEC
2,545,441	Method for Forming Glomerules	Barrett, E. P	Int

SUBGROUP 34–65—Enameling, japanning, and lacquering

The following patents relate to establishments engaged in enameling, japanning, and lacquering metal products.

Patent No.	Title of Invention	Inventor	Agency
2,476,957	Process for Producing Films of Chromated Proteins on Zinc.	Brenner, A Seegmiller, R. Riddell, G. E.	Com
2,525,107	Coating Composition for Metals	Whiting, L. R Wangner, P. F.	Navy
2,604,410	Porcelain Enamel for Direct Application to Metal and Process for Producing the Same.	Bryant, E. E	Army

SUBGROUP 34–66—Galvanizing and other hot-dip coating

The following patents relate to establishments engaged in galvanizing iron and steel sheets or formed products; in coating iron sheets or formed products with aluminum, lead, or zinc; and in retinning cans and utensils.

Patent No.	Title of Invention	Inventor	Agency
2,363,103	Coating Materials and Process for Making Them.	Watson, P. D	USDA
2,403,706	Metallic Coating	Bryant, E. E	Army
2,433,721	Polylactylic Acid Resins and Process for Making Them.	Watson, P. D	USDA
2,449,828	Polylactylic Acid Resins and Process for Making Them.	Watson, P. D	USDA
2,453,559	Polylactylic Acid Resins and Process for Making Them.	Watson, P. D	USDA
2,486,955	Producing Thin Film of Metal Oxide	Langwill, K. E	AEC
2,527,747	Apparatus for Coating Articles by Thermal Evaporation.	Lewis, M. N Miller, P. H.	Army
2,528,454	Coating Process	Schlesinger, H. I Schaeffer, G. W.	AEC
2,588,734	Pretreatment of Beryllium Prior to Coating.	Kolodney, M	AEC

SUBGROUP 34–68—Electroplating, plating, and polishing

The following patents relate to establishment engaged in all types of electroplating, plating, and metal-polishing work.

Patent No.	Title of Invention	Inventor	Agency
2,410,331	Acid Rhodium Plating	Brenner, A Olson, W. A.	Com
2,425,359	Apparatus for Producing Tapered Electrodeposits.	Zavarella, A	Army
2,458,676	Apparatus for Electroplating	Brenner, A Meites, T. S.	Com
2,492,204	Electrodeposition of Gold on Tantalum.	Van Gilder, R. D	Army
2,498,052	Method of Retarding Erosion of Gun Barrels.	Smith, N. H	Navy
2,528,454	Coating Process	Schlesinger, H. I Schaeffer, G. W.	AEC
2,532,283	Nickel Plating by Chemical Reduction.	Brenner, A Riddell, G. E.	Com
2,532,284	Cobalt Plating by Chemical Reduction.	Brenner, A Riddell, G. E.	Com
2,543,059	Apparatus for Electrowinning or Electroplating of Metals.	Rawles, W. T	Int
2,546,150	Method for Securing Adhesion of Electroplated Coating to a Metal Base.	Brenner, A Burkhead, P. S. Riddell, G. E.	Army
2,563,903	Electrolytic Cell for the Deposition of Gold and/or Silver from Solutions.	Zadra, J. B	Int
2,568,713	Instrument for Use in Determining the Stress in an Electrodeposit.	Brenner, A	Com
2,577,833	Process for Electrowinning Chromium.	Westby, G	Int
2,581,863	Process for Electrodepositing Uranium Dioxide.	Kahn, M	AEC
2,583,581	Metal Coating	Lukens, H. S	Army
2,584,816	Electroplating Control System	Sands, M. L	AEC
2,612,470	Selective Electrodeposition of Silver	Rogers, L. B Griess, J. C.	AEC

SUBGROUP 34–71—Lighting fixtures

The following patents relate to establishments engaged in manufacturing lighting fixtures and equipment of any type.

Patent No.	Title of Invention	Inventor	Agency
2,147,679	Illuminating System	Stanton, C. I Seaquist, E. O.	Com
2,362,500	Apparatus for Testing Flame Safety Lamps.	Quenon, E. E	Int
2,393,896	Autocollimating Button and Light Shield Therefor.	Freras, R. N	Army
2,452,822	Reflector	Wolf, J. M	Army
2,507,552	Blackout Automobile Headlight Masks.	Teele, R. P	Com
2,518,505	Headlamp for Motor Vehicles	Teele, R. P	Com

SUBGROUP 34–82—Wirework products

The following patents relate to establishments engaged in manufacturing ferrous and nonferrous wire products. Included are fencing, fly screening, cloth and netting, bare wire rope and cable,

barbed wire, chains, bale ties, etc. Insulated wire is classified in Subgroup 36–31.

Patent No.	Title of Invention	Inventor	Agency
2,107,071	Bale Identification Tag and a Method for Affixing the Same.	Gaus, G. E.	USDA
2,316,103	Hanger	Reed, J. O.	USDA
2,380,430	Clasp	Hallock, E. D.	Army
2,576,255	Reflecting Fabric	Hudspeth, E. L. Nash, J. P.	Navy

SUBGROUP 34–91—Metal shipping barrels, drums, kegs, and pails

The following patents relate to establishments engaged in manufacturing ferrous and nonferrous shipping barrels, drums, kegs, and pails.

Patent No.	Title of Invention	Inventor	Agency
2,419,915	Apparatus for the Storage of Fluorine	Priest, H. F. Grosse, A. V.	AEC
2,478,172	Packaging and Supporting Sleeve	Sanderson, W. J. Westover, B. J.	USDA
2,512,622	Firearm Container	Fish, S. W.	Army
2,514,909	Carrier for Radioactive Slugs	Strickland, G.	AEC
2,563,718	Shielded Container	Gifford, J. F.	AEC
2,571,302	Sampler for Highly Radioactive Substances.	Smith, W. Q.	AEC

SUBGROUP 34–93—Steel springs

The following patent relates to establishments engaged in manufacturing leaf springs, hot-wound springs, and coiled flat springs.

Patent No.	Title of Invention	Inventor	Agency
2,481,505	Shock Absorbing Means	Frazier, Q.	Army

SUBGROUP 34–94—Bolts, nuts, washers, and rivets

The following patent relates to establishments engaged in manufacturing bolts, nuts, washers, rivets, turnbuckles, wood screws, and toggle bolts.

Patent No.	Title of Invention	Inventor	Agency
2,460,222	Traveling Nut Limit Stop	Hall, W. S.	Navy

SUBGROUP 34–99—Fabricated metal products, not elsewhere classified

The following patents relate to establishments engaged in manufacturing metal products not elsewhere classified, including metal novelties and specialties.

Patent No.	Title of Invention	Inventor	Agency
2,365,233	Interlocking Grating Panel	Wilson, C. N.	Army
2,459,726	Computing Linkage	Svoboda, A.	Navy
2,460,533	Combined Hinged Tray and Door Fastner.	Potts, A. H.	GSA
2,495,276	Process for Making Multipiece Molds.	Milton, C. L.	Army
2,538,160	Method of Electroforming Molds	Milton, C. L. Nielson, C. A.	Army
2,549,596	Beryllium Target and Method of Manufacture.	Hamilton, J. G. Putnam, T. M. Wiens, J. H.	AEC

MAJOR GROUP 35—MACHINERY (EXCEPT ELECTRICAL)

The patents listed under this title relate generally to establishments engaged in manufacturing machinery and prime movers other than electrical equipment (Major Group 36). Machines powered by built-in or detachable electric motors ordinarily are included in this major group.

SUBGROUP 35–11—Steam engines, turbines, and water wheels

The following patents relate to establishments engaged in manufacturing steam engines, steam turbines, water wheels, and water turbines.

Patent No.	Title of Invention	Inventor	Agency
2,442,783	Turbine Rotor	Senn, J. A	Army
2,460,849	Constant Speed Rotor for Turbines	Senn, J. A	Army

SUBGROUP 35–19—Diesel and semi-diesel engines; and other internal-combustion engines, not elsewhere classified

The following patents relate to establishments engaged in manufacturing diesel or semi-diesel engines, and other internal-combustion engines, not elsewhere classified, for stationary, marine, traction, or other uses. Aircraft engines are classified in Subgroup 37–22, and automobile engines in Subgroup 37–14.

Patent No.	Title of Invention	Inventor	Agency
2,425,508	Dust Separator, Especially for Carburetor Air Intake Ducts.	Chilton, T. H Lapple, C. E.	Navy
2,442,783	Turbine Rotor	Senn, J. A	Army
2,488,361	Hydraulic Control Means for Internal Combustion Engines.	Witzky, J. E Lang, W. S. Jakob, R. J.	Army
2,515,068	Fuel Valve	Young, C. T	Navy
2,517,464	Preheating System for Internal Combustion Engines.	Corcoran, W. B	AF
2,529,465	Multiple Grain Rocket for Propelling Underwater Torpedoes.	Wallace, R. W Colburn, W. E.	Navy
2,543,693	Combustion Apparatus	Hildestad, H. L	Navy
2,554,401	Combustion Apparatus Provided with Gas Backflow-Inducing Means Adjacent the Nozzles.	Christensen, W. L. Redding, A. H.	Navy
2,557,883	Jet Propulsion Exhaust Nozzle Apparatus.	Miller, E. F	Navy
2,557,898	Gas Turbine Diaphragm	Thompson, A. S	Navy
2,560,118	Fuel Feeding Apparatus for Gas-Driven Turbines.	Malone, J. L McKinnell, M.	Navy
2,563,532	Spontaneous Ignition of Gasoline and Nitric Acid.	Kistiakowsky, G. B.	Navy
2,574,190	Turbine Apparatus	New, W. R	Navy
2,576,352	Fuel Governor for Jet Engines	Neal, R. A	Navy
2,578,275	Air-Free Lubricant Pump Discharge System.	Whiteman, I. R	Navy
2,585,205	Liquid Fuel Injector	Young, C. T	Navy
2,602,632	High-Speed Bearing and Turbine	Serduke, J. T Webster, R. O.	AEC
2,603,061	Rocket Loading Arrangement	Avery, W. H	Navy
2,619,078	Cylinder Head Assembly for Internal-Combustion Engines.	Witzky, J. E Lang, W. S. Jakob, R. J.	Army
2,619,189	Lubricating System for Internal-Combustion Engines.	Witzky, J. E Lang, W. S. Jakob, R. J.	Army

SUBGROUP 35–21—Tractors

The following patents relate to establishments engaged in manufacturng wheel-type and track-laying tractors, and garden tractors. Industrial trucks, tractors, and trailers used for handling materials in industrial plants, depots, and docks are classified in Subgroup 35–65.

Patent No.	Title of Invention	Inventor	Agency
2,234,927	Link for Endless Traction Belts	Kubaugh, L. M	Army
2,436,681	Vehicle	Swenson, C. E	Navy
2,438,424	Method of Fabricating Track Laying Vehicle Shoes.	Swenson, C. E	Navy

Patent No.	Title of Invention	Inventor	Agency
2,441,132	Shield for Tractors	Blakey, H. L.	Int
2,444,734	Backlash Eliminator for Planetary Gears.	Gillett, G. D.	Navy
2,444,759	Wheeled Vehicle	Swennes, B. A.	Navy
2,459,470	Motor Vehicle Fuel Tank	Swennes, B. A.	Navy
2,459,975	Wheels for Endless Track Vehicles and Method for Mounting Same.	Swennes, B. A. Shelton, L. E. Swenson, C. E.	Navy

SUBGROUP 35–22—Agricultural machinery (except tractors)

The following patents relate to establishments engaged in manufacturing agricultural machinery and equipment (except tractors-Subgroup 35–21) for use in the preparation or maintenance of soil, planting and harvesting of crops, preparing crops for market, or for other agricultural operations and processes.

Patent No.	Title of Invention	Inventor	Agency
2,107,071	Bale Identification Tag and a Method for Affixing the Same.	Gaus, G. E.	USDA
2,190,655	Distributor	Filler, C. G.	TVA
2,296,849	Cabinet for the Quick Sprouting of Soybeans for Food.	Hammerstrom, H. H. Davis, W. B.	USDA
2,326,097	Hinged Moldboard Plow	Horner, G. M. Naffziger, L. M.	USDA
2,339,394	Baler	Harmond, J. E.	USDA
2,435,056	Method of Applying Plant Response Substances.	Schomer, H. A. Hamner, C. L.	USDA
2,460,029	Russian Dandelion Seed Harvester	Ramp, R. M.	USDA
2,517,597	Peanut Digging Machine	Reed, I. F. Brown, O. A.	USDA
2,556,162	Method of Soil Erosion Control	Benson, J. R.	Int
2,565,352	Smoke Pot	Champney, H. H. Counterman, L. B.	Army

SUBGROUP 35–31—Construction, mining, and similar machinery (except oil-field machinery and tools)

The following patents relate to establishments engaged in manufacturing heavy machinery and equipment used by the construction and mining industries for portable or fixed-plant operation, in dredging, excavating, road and airport construction, ore and rock crushing, screening or washing, ore dressing or concentration. Well-drilling machinery is classified in Subgroup 35–32, and coal and ore conveyors in Subgroup 35–63.

Patent No.	Title of Invention	Inventor	Agency
2,115,742	Mixing	Newton, R. H.	TVA
2,169,316	Tag Line Hoist for Fish Lift Gates	Zwald, A.	Army
2,192,912	Washer	Howie, H.	TVA
2,297,689	Separation of Feldspar from Quartz	O'Meara, R. G.	Int
2,317,413	Process for the Concentration of Boron Chemically Combined from its Ores by Autoflotation.	Keith, S. F.	Int
2,343,795	Earth Moving Machine	Pellett, J. J.	USDA
2,363,029	Treatment of Magnesite Ores	Weinig, A. J.	Navy
2,363,030	Flotation of Magnesite	Weinig, A. J.	Navy
2,363,031	Froth Flotation Treatment of Low Grade Magnesite Ores.	Weinig, A. J.	Navy
2,363,104	Magnesite Ore Treatment	Weinig, A. J.	Navy
2,383,467	Flotation of Iron Ores	Clemmer, J. B. Clemmons, B. H.	Int
2,391,480	Laboratory Hammer Mill	Mullins, J. F. Hardesty, J. O. Ross, W. H. Shipley, E. S.	USDA
2,393,008	Ore Concentration	Woodward, H. S. Bates, W. R.	Navy
2,412,217	Froth Flotation of Chromite with Fluoride.	Havens, R.	Int
2,414,815	Beneficiation of Beryllium Ores	Kennedy, J. S. O'Meara, R. G.	Int

Patent No.	Title of Invention	Inventor	Agency
2,415,416	Froth Flotation of Silica from Iron Ore with Anionic Collector.	Clemmer, J. B. Williams, M. F.	Int
2,418,821	Plural Stage Hydraulic Classifier	Coghill, W. H. Coe, G. D.	Int
2,419,945	Froth Flotation of Silica from Iron Ore.	Clemmer, J. B. Williams, M. F.	Int
2,443,176	V-Opening Screen	Banning, L. H.	Int
2,448,533	Consistency Meter	Laurence, H. W.	Int
2,476,999	Solvation and Depolymerization of Coal.	Orchin, M.	Int
2,503,247	Electronic Detector	Daum, C. R. Cleaver, L. T.	Int
2,506,587	Vibrator Type Multiple-Shot Blasting Unit.	Gibson, F. C. Brown, F. W.	Int
2,516,884	Method and Apparatus for Preparation and Distribution of Sizing Materials.	Kyame, G. J.	USDA
2,556,162	Method of Soil Erosion Control	Benson, J. R.	Int
2,621,022	Method of Drilling Overburden, Unconsolidated Rock Formation or Placer Ground with Low-Temperature Freezing Fluids.	Bardill, J. D.	Int

SUBGROUP 35–32—Oil-field machinery and tools

The following patents relate to establishments engaged in manufacturing machinery and tools for use in oil and gas fields, or for drilling water wells.

Patent No.	Title of Invention	Inventor	Agency
2,364,088	Core Drilling	Miller, H. C. Berwald, W. B. Taliaferro, D. B.	Int
2,580,457	Measurement Apparatus	Norris, S. E.	Int
2,584,801	Pipe Extractor	Handforth, S. L.	AEC
2,588,369	Apparatus for Use in the Treatment of Oil, Gas, and Gas-Condensate Wells.	Eilerts, C. K.	Int

SUBGROUP 35–41—Machine tools

The following patents relate to establishments engaged in manufacturing power-driven machine tools that shape metal by grinding or progressively cutting away chips. Important products include boring, broaching, drilling, gear-cutting and finishing, grinding, milling, and planing machines; lathes, shapers, and slotters; honing and lapping, polishing and buffing, sawing and cutting-off, contour-sawing and filing, tapping, threading, and rifling machines, and replacement and repair parts for machine tools. Machinery for the shaping, pressing, or forging of metal, where the shaping action of such machines is not dependent upon a cutting tool are classified in Subgroup 35–42, and machine-tool accessories, dies, and machinists' precision tools in Subgroup 35–43.

Patent No.	Title of Invention	Inventor	Agency
2,319,206	Machine for Rifling Guns	Bush, V.	Army
2,415,300	Machine for Rifling Gun Barrels	Lovely, J. E.	Navy
2,438,941	Diamond Die Production and the Like.	Emerson, W. B. Nefflen, K. F. Peters, C. G. Harris, F. K. Cooter, I. L.	Com
2,462,997	Attachment for Milling Machines	Roush, J. L.	AEC
2,476,965	Electric Drilling of Diamonds and the Like.	Emerson, W. B. Cooter, I. L.	Com
2,551,061	Method of and Device for Grinding Interior Faces of Tubes.	Saccas, G. N. Simpson, F. R.	Army
2,584,121	Device for Contour Dressing Grinding Wheels.	Garand, J. C.	Army
2,608,895	Surfacing Method and Apparatus	Culling, M. A.	Int

SUBGROUP 35–42—Metalworking machinery (except machine tools)

The following patents relate to establishments engaged in manufacturing machinery for shaping, pressing, forging, or bending metal, where the shaping action of such machines is not dependent upon a cutting tool. Important products include bending machines; can forming and soldering, and other sheet-metalworking machinery;

die-casting machines; forging machines, such as drop hammers (impression die), forging hammers (flat die), forging presses, bulldozers, and upsetters; portable power-driven metalworking tools, and flexible-shaft machines; presses (forming, stamping, and punch); riveting machines (not portable); rod and wire-forming and fabricating machines; rolling-mill machinery and equipment; shears; spring-winding and forming machines; acetylene welding and cutting apparatus; wire-drawing machines; and replacement and repair parts. Electric welding apparatus is classified in Subgroup 36–17.

Patent No.	Title of Invention	Inventor	Agency
2,232,071	Method of Manufacturing Metallic Cartridge Belt Links.	Laystrom, H. A.	Army
2,261,627	Method and Means for Making Metallic Cartridge Links.	Laystrom, H. A.	Army
2,355,964	Die Structure for Metallic Cartridge Belt Links.	Fernlund, K. H. Hessler, J. O. Hultberg, A.	Army
2,355,992	Cartridge Belt Link Manufacture	Moinichen, P.	Army
2,387,042	Subaqueous Electric Cutting	Seifried, E.	Navy
2,405,098	Testing Machine for Metallic Cartridge Belt Links.	Persson, P. O. Spohr, C. W.	Army
2,407,850	Subaqueous Electric Cutting	Seifried, E.	Navy
2,420,147	Means and Method for Making Metallic Cartridge Belt Links.	Norgren, E.	Army
2,420,908	Metallic Cartridge Belt Link	Persson, P. O.	Army
2,421,649	Method of Welding or Cutting Metal by Hydrogen-Fluoring Flame.	Priest, H. F. Grosse, A. V.	AEC
2,423,862	Binding and Covering Apparatus	Vorobik, C. E.	Navy
2,425,017	Attachment of Hair Springs to Arbors.	Wentz, R. R.	Army
2,426,448	Metallic Cartridge Belt Link	Goldfisher, F.	Army
2,431,732	Locating and Welding Fixture	Colbert, E.	AEC
2,431,975	Method of Welding Carbon to Molybdenum.	Yockey, H. P. Nuding, J. M.	AEC
2,438,941	Diamond Die Production and the Like.	Emerson, W. B. Nefflen, K. F. Peters, C. G. Harris, F. K. Cooter, I. L.	Com
2,442,372	Method of Manufacturing Sodium Methyl Arsenate.	Miller, G. E. Seaton, S. G.	Army
2,466,187	Ingot Scalping Machine	Tretheway, W. J.	Navy
2,545,441	Method for Forming Glomerules	Barrett, E. P.	Int
2,591,777	Process of Forming a Machining Lubricant upon Molybdenum.	Bowen, D. B.	Navy
2,602,871	Nickel Welding	Noland, R. A. Szymko, C. T.	AEC
2,607,024	Automatic Arc Starting Device	Marwell, E. M. Kenngott, R. L.	AEC

SUBGROUP 35–43—Machine-tool accessories, other metalworking-machinery accessories, and machinists' precision tools

The following patents relate to establishments engaged in manufacturing attachments and accessories for machine tools and other metalworking machinery; small power-driven cutting and shaping tools and tool holders; and precision measuring tools. Important products include: (1) attachments for lathes, boring, drilling, and milling machines, and other machine tools; balancing machines; die-casting dies; jigs, fixtures, drop-forging dies, forming and stamping dies and punches, and subpresses; tools for screw and automatic machines; and semi-finished products such as die sets, leather pins, dowel pins, and die springs; (2) arbors and collars; broaches; collets or sockets; counterbores; countersinks; countersink-drill combinations; drills; cutters; reamers; threading tools (taps, dies, and pipe-threading tools); and other cutting tools and tool holders; and (3) precision measuring tools (micrometers and verniers); guages (plug, ring, snap, and thread); and other measuring tools.

Patent No.	Title of Invention	Inventor	Agency
2,286,286	Machine for Testing Metallic Cartridge Belt Links.	Laystrom, H. A. Persson, P. O.	Army
2,398,250	Drilling Machine	Robbins, L.	Navy
2,398,251	Drilling Machine	Robbins, L.	Navy
2,404,889	Collocating Gauge	Ringie, D. F.	Navy
2,447,000	Play-Minimizing Means for Adjustable Gauging Members.	Darmody, W. J.	Army

Patent No.	Title of Invention	Inventor	Agency
2,449,625	Die Assembly	Stuart, J.	Army
2,462,997	Attachment for Milling Machines	Roush, J. L.	AEC
2,463,563	Gasket Forming Machine	Robinson, J.	Army
2,485,858	Milling Machine	Boykin, R. O.	Navy
2,514,116	Induction Reamer	Baker, W. R.	AEC
2,517,106	Cutting Tool for Emptying Shells	Hamlin, D. W.	Navy
2,520,396	Die Structure for Metallic Cartridge Belt Links.	Goldfisher, F.	Army
2,521,917	Micrometer	Holliday, C. Hamilton, A. A.	Navy
2,523,464	Electric Thrust Guage	Golden, S. Comley, E. A. Alexander, N. E.	Navy
2,551,652	Machine for Inserting a Glass Tube into a Stopper.	Vreeland, W. R.	Int
2,569,854	Drill Tool	Hatcher, A. P.	AEC
2,586,027	Casting Apparatus	Gray, C. F.	AEC
2,589,852	Mechanical Tracking Device	Overacker, H. E.	Army
2,597,596	Insulator Bushing Seal	Reid, J. D.	AEC
2,608,895	Surfacing Method and Apparatus	Culling, M. A.	Int

SUBGROUP 35–51—Food-products machinery

The following patents relate to establishments engaged in manufacturing machinery for use by the food-products and beverage manufacturing industries in the preparation, canning, or packaging of food products. Important products include bakers' machinery and equipment (bake ovens, bread-slicing machines, wrapping machines, and dough mixers); canning machinery; chocolate and confectionary machinery; dairy products machinery and equipment, including fluid milk processing machinery, butter, cheese and ice cream machinery, condensed and evaporated milk machinery, and related equipment; flour-mill and grain-mill machinery; packing house machinery; sugar-mill machinery; coffee-roasting and grinding machines, food choppers, grinders, mixers, and slicers; peanut roasters; popcorn machines; and parts and attachments. Refrigeration machinery is classified in Subgroup 35–85.

Patent No.	Title of Invention	Inventor	Agency
2,333,638	Process of Packaging Dehydrated Molasses.	Chalkley, L.	Com
2,360,108	High-Frequency Desiccator	Christie, A.	USDA
2,361,151	Cooker and Dehydrator	Reed, J. O.	USDA
2,370,422	Dehydrators	Reed, J. O.	USDA
2,379,459	Temperature Indicator	Schreiber, R. P. Lee, W. M.	Army
2,399,696	Combination Sunlight or Artificial Heat Dehydrator and Hotbed.	Schreiber, W. T.	USDA
2,403,923	Device for Peeling Agricultural Products.	Hemmeter, G. T.	USDA
2,406,395	Process of Dehydrating Meats Containing Fats in a Fluid Current.	Noel, W. A.	USDA
2,445,115	Heat Exchanger	Hanrahan, F. P.	USDA
2,445,881	Apparatus for Peeling Onions, Including a Conical Jet of Gas.	Hemmeter, G. T.	USDA
2,448,175	Extraction of Rutin	Eskew, R. K.	USDA
2,454,915	Isolation of Lipovitellenin From Egg Yolk.	Fevold, H. L. Dimick, A. L.	USDA
2,457,315	Volatile Flavor Recovery Process	Milleville, H. P.	USDA
2,460,117	Still and Decanter for the Recovery of Products From Alcoholic Solutions of Oleaginous Materials.	Beckel, A. C. Belter, P. A.	USDA
2,479,745	Process for the Production of Apple Essence.	Homiller, R. P. Griffin, E. L.	USDA
2,507,550	Method of Cooling Compressed Blocks of Dehydrated Vegetable Matter.	Smith, G. S.	USDA
2,510,138	Citrus Juices and Removal of Volatile Oils Therefrom.	Pulley, G. N. Velkhuis, M. K.	USDA
2,530,376	Vacuum Distillation	Castle, F. J. Beal, R. E.	USDA
2,531,431	Method of Preparing Calcium Firmed Frozen Apple Slices.	Hills, C. H.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,537,053	Rotary Blancher or Cooker	Hemmeter, G. T.	USDA
2,572,846	Process for the Preparation of Full Flavored Fruit Concentrate.	Homiller, R. P. Eisenhardt, N. H.	USDA
2,576,952	Apparatus for Spray Coating Particles	Lowe, E. Swenson, H. A.	USDA
2,585,970	Method and Apparatus for Heating Fluids.	Shaw, T. M.	USDA
2,605,856	Deaerating System for Water or Steam Condensate.	Kirkpatrick, A. McMeen, H. H.	AEC

SUBGROUP 35–52—Textile machinery

The following patents relate to establishments engaged in manufacturing machinery for the textile industries. Important products include: (1) fiber-to-fabric machinery, such as picker, carding, combing, garnetting, and spinning machines, doubling and twisting frames, winders, and beaming, warping, and slashing machines; (2) fabric machinery, such as knitting and braiding machines, looms for weaving, and jacquard, lace, net embroidery, cordage and rope machines; (3) machinery for bleaching, dyeing, printing, mercerizing, finishing, and drying stock, yarn, and cloth; and (4) extra parts, attachments, and accessories, not elsewhere classified.

Patent No.	Title of Invention	Inventor	Agency
2,042,457	Stretch and Compression Testing Device.	Conn, W. T.	Com
2,119,525	Preservative Process for Vegetable Fibers.	Conn, W. T.	Com
2,268,677	Means for Testing the Resistance of Fabrics to Snagging.	Shearer, H. E. Schenke, E. M.	Com
2,344,528	Materials-Conveying Flue	Asbill, C. M.	USDA
2,365,793	Cotton-Working Machine	Asbill, C. M. Young, R. C.	USDA
2,370,129	Cutting Machine	Asbill, C. M. Hill, G. B.	USDA
2,417,869	Application of Cellulose Ethers to Textiles.	Barnes, L. B. Goldthwait, C. F. Smith, H. O.	USDA
2,439,903	Thread Advancing, Storage, and Stretching Reel.	O'Connell, R. A.	USDA
2,444,064	Method of Treating Tire Cord	Philipp, H. J.	USDA
2,448,153	Process of making Cotton Textiles Water-Absorbent and Rot-Resistant.	Reid, J. D. Daul, G. C.	USDA
2,449,215	Method of Producing Cotton Cordage.	Goldthwait, C. F. Smith, H. O.	USDA
2,466,615	Photoelectric Apparatus for Measuring Lap Uniformity having Means to Minimize Tension on the Lap.	Rusca, R. A. Sens, C. L.	USDA
2,469,767	Self-Advancing Winding Reel	Hellbach, R.	USDA
2,474,927	Cord Stretching Apparatus	Young, R. C. Brown, J. J.	USDA
2,492,187	Method and Apparatus for Electrical Heating.	Rusca, R. A.	USDA
2,512,645	Self-Advancing Winding Reel	Hellbach, R.	USDA
2,516,884	Method and Apparatus for Preparation and Distribution of Sizing Materials.	Kyame, G. J.	USDA
2,564,725	Apparatus for Applying Sizing and Other Coating.	Rusca, R. A.	USDA
2,578,744	Method and Apparatus for Drying Sized or Otherwise Impregnated Textile Material.	Rusca, R. A. Kyame, G. J.	USDA
2,596,154	Padder, Mangle, or Squeeze Rolls for Improved Extraction and Impregnation of Textile Fibers, Yarns, and Fabrics.	Keating, J. F.	USDA

SUBGROUP 35–54—Paper-industries machinery

The following patent relates to establishments engaged in manufacturing machinery for the paper-pulp, paper, and paper-product industries.

Patent No.	Title of Invention	Inventor	Agency
2,256,507	Apparatus for Conditioning Paper	Weber, C. G. Geib, M. N.	Com

SUBGROUP 35–59—Special-industry machinery, not elsewhere classified

The following patents relate to establishments engaged in manufacturing special-industry machinery, not elsewhere classified, such as smelting and refining equipment, cement-making, clay-working, cotton-ginning, glass-making, hat-making, incandescent lamp-making, leather-working, paint-making, rubber-working, tobacco-working, cigar and cigarette-making, shoe-making, and stone-working machinery.

Patent No.	Title of Invention	Inventor	Agency
2,080,418	Apparatus for Making Ceramic Articles.	Gould, R. E.	TVA
2,098,962	Method for Carrying out Aeration in Biochemical Processes.	Hellbach, R.	USDA
2,115,742	Mixing	Newton, R. H.	TVA
2,143,003	Making Ceramic Articles	Gould, R. E.	TVA
2,144,306	Cotton Condenser Sampling Device	Gaus, G. E.	USDA
2,156,893	Cotton Sampler Apparatus	Gaus, G. E. Franks, G. N.	USDA
2,156,894	Cotton Sampler for Cotton Condensers.	Gaus, G. E. Stedrousky, V. L.	USDA
2,166,811	Cotton Sample Selecting Device	Gaus, G. E.	USDA
2,173,071	Machine for Sampling Cotton	Gaus, G. E. McWhirter, R. G.	USDA
2,173,107	Making Ceramic Articles	Gould, R. E.	TVA
2,221,794	Forming Ceramic Ware	Gould, R. E. Deaderick, D. A.	TVA
2,273,859	Making Ceramic Articles	Gould, R. E.	TVA
2,288,662	Cooking Oleaginous Material	Weigel, F. W.	TVA
2,297,300	Process for the Granulation of Crystalline Materials.	Hardesty, J. O. Ross, W. H.	USDA
2,319,365	Fractionating Apparatus	Reed, J. O.	USDA
2,331,117	Dispensing Apparatus	Goodhue, L. D. Sullivan, W. N.	USDA
2,374,674	Method for Thermal Decomposition of Metallic Nitrates.	Fox, A. L. Chindgren, C. J.	Int
2,412,658	Charging Mechanism	Stuart, J. Wasen, K.	Army
2,417,422	Manipulatable Serving Support	Kurtz, A. W.	Army
2,443,586	Extrusion Machine Seal	Stuart, J.	Army
2,449,625	Die Assembly	Stuart, J.	Army
2,453,404	Apparatus for Making Plastic Masses	Bohlman, W. S. Bruce, D. S.	Army
2,458,953	Apparatus and Method for Determining the Scuff Resistance of Leather.	Mann, C. W.	USDA
2,460,954	Cutting Machine	Stuart, J.	Army
2,466,187	Ingot Scalping Machine	Tretheway, W. J.	Navy
2,475,141	Process of Concentrating Aqueous Rubber Dispersion Centrifuging.	Jones, E. P.	USDA
2,482,127	Apparatus for Refining Metals	Schlechten, A. W. Kroll, W. J. Yerkes, L. A.	Int
2,500,492	Apparatus for Handling Materials	Henriques, F. C.	AEC
2,502,490	Reaction and Stratifying Container	Sweet, A. T.	Int
2,503,247	Electronic Detector	Daum, C. R. Cleaver, L. T.	Int
2,508,989	Apparatus for Purifying Gases	Brandegee, M. M.	AEC
2,514,275	Apparatus for Condensing Metal Vapors.	Allen, C. H.	Navy
2,542,031	Fermentor for Submerged Cultures	Humfeld, H. Aeschlimann, E. Hoffman, J. R.	USDA
2,546,700	Multiple Chisel Structure for Disintegrating and Removing Incrustations from Interior Walls of Receptacles.	Prescott, C. H.	AEC
2,547,409	Guiding Means for Movement of Solid Materials.	Prescott, C. H.	AEC
2,551,652	Machine for Inserting a Glass Tube into a Stopper.	Vreeland, W. R.	Int
2,607,958	Fiber Doffing Device	Rusca, R. A. Young, R. C.	USDA

SUBGROUP 35–61—Pumps, air and gas compressors, and pumping equipment

The following patents relate to establishments engaged in manufacturing pumps, compressors, and pumping equipment for general industrial use. Important products include hand and power-driven pumps, pumps for fluid power systems, air compressors, gas compressors (except icemaking, refrigerating, and air-conditioning units—Subgroup 35–85), and spraying and dusting units for paints and chemicals. Measuring-and-dispensing pumps for gasoline service station use are classified in Subgroup 35–86.

Patent No.	Title of Invention	Inventor	Agency
2,261,802	Apparatus for Measuring the Coarseness of Powders.	Gooden, E. L.	USDA
2,285,048	Filter Apparatus	Palkin, S.	USDA
2,295,529	Device for Compacting Powders	Gooden, E. L.	USDA
2,313,976	Apparatus for Dispersing Insecticides.	Sullivan, W. N. Goodhue, L. D.	USDA
2,331,117	Dispensing Apparatus	Goodhue, L. D. Sullivan, W. N.	USDA
2,395,827	Airplane Spray Unit	Husman, C. N. Longcoy, O. M.	USDA
2,399,634	Handling Molten Magnesium	Holland, W. D. Berry, C. W. McClintock, W. O.	Navy
2,401,583	Method of Sea Water Foam Suppression and Apparatus.	Redfield, A. C. Vine, A. C.	Navy
2,409,987	Microspray Device	Schroeder, H. O. Lindquist, A. W.	USDA
2,436,478	Device for Producing Aerosols	Lindquist, A. W. Husman, C. N. Schroeder, H. O.	USDA
2,441,042	Calibrating Means for Pitot Venturi Tubes.	Stoll, H. W.	AEC
2,442,783	Turbine Rotor	Senn, J. A.	Army
2,461,746	Aerator	Lathrop, E. C. Aronovsky, S. I.	USDA
2,474,042	Vibration Eliminating Apparatus	Egle, E. J.	AEC
2,481,320	Magnetic Pump	Madorsky, S. L.	AEC
2,481,489	Filter	Becker, O. A.	Army
2,488,361	Hydraulic Control Means for Internal Combustion Engines.	Witzky, J. E. Lang, W. S. Jakob, R. J.	Army
2,492,173	Flow of Thickened Fluids	Mysels, K. J.	Army
2,499,839	High-Speed Mercury Diffusion Pump.	Stoltenberg, G. R.	AEC
2,501,461	Valve	Wirth, H. E.	AEC
2,502,074	Method and Apparatus for Pumping Corrosive Mediums.	Brown, H. S. Hubble, H. H.	AEC
2,515,159	Quick Operating Valve	Zurcher, E.	AEC
2,528,415	Pump	Boorse, H. A. Boeker, G. F.	AEC
2,531,745	Squeexe-Bottle Atomizer for Acid Liquids.	Schopmeyer, C. S.	USDA
2,537,742	Stressed Pumping Cylinder Assembly for Liquid Oxygen.	Collins, S. G.	AF
2,546,963	Float Gate	Black, C. M.	Int
2,551,541	Improved Vacuum Pumping Method with Mechanical Oil Sealed Pumps.	Knox, F. A.	AEC
2,558,698	Electromagnetic Pump	Wade, E. J.	AEC
2,619,912	Pneumatic Application for Gear Pumps.	Shames, A. A.	Navy

SUBGROUP 35–62—Elevators, escalators and fish lifts

The following patents relate to establishments engaged in manufacturing passenger or freight elevators, automobile lifts, dumbwaiters, escalators, and fish lifts. Conveyor systems and equipment are classified in Subgroup 35–63.

Patent No.	Title of Invention	Inventor	Agency
2,102,628	Telescopic Barrier in Connection with Exit Portal in Fish Lifts.	Knerr, L. E.	Army
2,102,629	Fish Trap for Fish Lifts	Knerr, L. E.	Army
2,104,042	Automatic Control Mechanism for Fish Lock Drainage.	Jolliffe, J. P.	Army

Patent No.	Title of Invention	Inventor	Agency
2,119,540	Method and Apparatus for Transferring Migratory Fish over a Dam Structure.	Holmes, H. B. Blood, H. F. Bell, M. C.	Army
2,119,547	Lifting Beam Mechanism	Knerr, L. E.	Army
2,119,555	Fish Ladder Assembly	Peterson, B. L.	Army
2,121,787	Method and Apparatus for Determining the Migration of Fish.	Dahlgren, E. H.	Com
2,125,311	Water Supply and Drainage System for Fishlocks.	Peterson, B. L.	Army
2,125,928	Mechanism for Selectively Hooking Segmental Gate Structures.	Knerr, L. E.	Army
2,125,962	Apparatus for Altering Position of Fishway Portals.	Shoemaker, G. W.	Army
2,126,783	Sealing Means for Segmental Gates	Knerr, L. E.	Army
2,168,341	Fishway	Holmes, H. B. Blood, H. F. Bell, M. C.	Army
2,169,249	Method of and Means for Effecting Downstream Migration of Fish about Dams.	Holmes, H. B. Blood, H. F. Bell, M. C.	Army
2,169,316	Tag Line Hoist for Fish Lift Gates	Zwald, A.	Army
2,171,560	Method of and Apparatus for Fishway Collecting System.	Holmes, H. B. Blood, H. F. Bell, M. C.	Army

SUBGROUP 35–63—Conveyors and conveying equipment

The following patents relate to establishments engaged in manufacturing conveyors and conveying equipment for installation in factories, warehouses, mines, and other industrial and commercial establishments. Passenger or freight elevators, dumb-waiters, escalators, and fish lifts are classified in Subgroup 35–62.

Patent No.	Title of Invention	Inventor	Agency
2,129,688	Vibrated Conveyor Feeder	Hendrix, A. T.	TVA
2,405,447	Feed Structure for Cartridge Belt Links.	Persson, P. O. Spohr, C. W.	Army
2,463,532	Barrier Structure for Rollerways	Griffith, F. L.	Army
2,528,945	Dispensing Device	Carpenter, T. H.	Navy
2,536,021	Material Feeding Unit	Banning, L. H.	Int

SUBGROUP 35–64—Blowers, exhaust and ventilating fans

The following patents relate to establishments engaged in manuturing blowers, and exhaust and ventilating fans for general industrial, commercial, and household use, including attic fans, blower-filter units (furnace blowers), and fans for mechanical draft.

Patent No.	Title of Invention	Inventor	Agency
2,339,254	Warm Air Furnace	Dill, R. S.	Com
2,371,629	Means for Producing Artificial Thermals.	Lee, F. W.	Int
2,497,823	Radiation Measuring Device for Air Filters.	Molloy, E. W.	AEC

SUBGROUP 35–65—Industrial trucks, tractors, trailers, and stackers

The following patents relate to establishments engaged in manufacturing industrial trucks, tractors, trailers, stackers, and accessories used for handling materials on floors and paved surfaces in and around industrial plants, depots, docks, and terminals. Wheel-type and tracklaying tractors are classified in Subgroup 35–21.

Patent No.	Title of Invention	Inventor	Agency
2,262,037	Elevating Truck	Norton, C. E.	TVA
2,472,939	Crate having Lifting Means	Connolly, C. A.	USDA
2,478,192	Lifting Hook for Heavy Containers	Harker, D. L.	USDA

SUBGROUP 35–66—Mechanical power-transmission equipment (except ball and roller bearings)

The following patents relate to establishments engaged in manufacturing mechanical power-transmission equipment such as chain drives, variable speed drives, speed reducers, gears, clutches (mechanical, hydraulic, or magnetic), shafts, bearings (except ball and roller—Subgroup 35–93), and parts for such equipment. Automobile power-transmission equipment is classified in Subgroup 37–14.

Patent No.	Title of Invention	Inventor	Agency
2,281,913	Power Transmission Means	Brooks, S. H.	Just
2,281,914	Lubricated Shaft and Gear Means	Brooks, S. H.	Just

Patent No.	Title of Invention	Inventor	Agency
2,315,589	Power Transmission	Brooks, S. H	Just
2,324,061	Hinged Joint	Brooks, S. H	Just
2,324,062	Flexible Joint	Brooks, S. H	Just
2,330,552	Lubricated Hinged Shaft Joint	Brooks, S. H	Just
2,337,520	Bracket	Brooks, S. H	Just
2,342,625	Bracket	Brooks, S. H	Just
2,346,507	Gear Construction	Quinn, A. J	Just
2,410,832	Snap-On Propeller	McLean, W. B	Army
2,443,629	Releasable Connecting Mechanism	Matuszewski, M	Army
2,444,734	Backlash Eliminator for Planetary Gears.	Gillett, G. D	Navy
2,456,478	Selective Propulsion Means for Amphibious Craft.	Anderson, M. B	Navy
2,460,222	Traveling Nut Limit Stop	Hall, W. S	Navy
2,467,592	Driving Mechanism for X-Ray Grids	Morgan, R. H Hodges, P. C.	Army
2,498,034	Dithering Device	Erwood, J	Navy
2,498,036	Transmission	Grace, W. J	Navy
2,513,217	Gear Train	Tomlines, T. F	Navy
2,516,308	Variable Speed Induction Motor System.	Forrester, J. W Everett, R. R.	Navy
2,522,536	Mechanical Acceleration Integrator	Rabinow, J	Navy
2,528,645	Hydraulic Power Transmission Apparatus.	Edwards, E. A	Army
2,528,963	Drive for Nutators	Looney, C. T	Navy
2,532,656	Hydraulic Damper	Backus, W. M Jarvis, C. W.	Navy
2,537,722	Overrunning Clutch	Walton, C. E	Navy
2,539,065	Friction Clutch and Brake Mechanism.	Erwood, J Beck, C.	Navy
2,552,488	Gear Drive for Dial Mechanisms	Klein, N. E	Navy
2,555,119	Planetary Variable Speed Friction Transmission.	Elliott, H. F	Army
2,566,034	Cam and Follower Mechanism for Complex Motion.	Roberts, R. A	Navy
2,568,061	Rotary Shaft Driven Tappet	Evans, Q. J	AEC
2,572,546	Recorder Drive Mechanism	Walton, C. E	Navy
2,573,506	Cam System	Stokes, J. F	Navy
2,575,360	Magnetic Fluid Torque and Force Transmitting Device.	Rabinow, J	Army
2,590,844	Automatic Selector Clutch Assembly for Search Receivers.	Curran, J. F	Army
2,597,324	Variable Speed Drive	Hodges, H. T	Army
2,622,713	High-Speed Magnetic Fluid Clutch	Rabinow, J	Army

SUBGROUP 35–67—Industrial furnaces and ovens

The following patents relate to establishments engaged in manufacturing electric, coal, gas, oil, and other fuel-fired or steam-heated industrial furnaces and ovens. Electric heating units for furnaces and ovens are classified in Subgroup 36–19.

Patent No.	Title of Invention	Inventor	Agency
2,094,027	Apparatus for Electrical Carbonization of Coal.	Stitzer, R. B	TVA
2,201,989	Ceramic Support	Davis, A. L	TVA
2,231,033	Ceramic Support	Smith, W. F	TVA
2,233,434	Ceramic Support	Smith, W. F	TVA
2,243,096	Electrode Seal	Hardin, S. A	TVA
2,272,219	Kiln Ring Cutting Machine	McCoy, W. M	TVA
2,396,474	Desiccator Unit	Riley, J. F	Navy
2,410,384	Furnace Control Systems	Lindsay, H. W	AEC
2,431,905	Quick Locking Furnace Base Plate	Anicetti, R. J	AEC
2,438,123	Charging Seal for Stoves	Lambert, R. D Bailey, C. L.	TVA
2,441,562	Continuous Reading Thermocouple Temperature Measuring Device for Rotary Vessels.	Chase, L. R Dimick, R. H.	Int

Patent No.	Title of Invention	Inventor	Agency
2,509,228	Electric Furnace for Phosphate Reduction.	Hardin, S. A.	TVA
2,532,322	Phosphorous Combustion Furnace	McFarlin, C. J.	TVA
2,542,028	Apparatus for High-Frequency Retorting.	Hodge, V. M.	Int
2,562,153	Vacuum Distillation	Taylor, T. I.	AEC

SUBGROUP 35–71—Computing machines

The following patents relate to establishments engaged in manufacturing adding, calculating, tabulating, and bookkeeping machines; cardpunching, sorting, and tabulating machines; and cash registers. Typewriters are classified in Subgroup 35–72.

Patent No.	Title of Invention	Inventor	Agency
2,041,637	Ribbon Shift Mechanism for Tabulating Machines.	Duncan, R. Wilkinson, L. F.	Com
2,056,841	Perforated Record Controlled Tabulating Machines.	Duncan, R. Wilkinson, L. F.	Com
2,059,216	Printing Mechanism for Tabulating Machines.	Duncan, R. Wilkinson, L. F.	Com
2,089,603	Ciphering Machine	Hagelin, B. C.	Army
2,441,387	Electronic Squaring Circuit	Berger, F. B. Higinbotham, W. A.	Army
2,477,527	Harmonic Computing Mechanism	Pierce, F.	Navy

SUBGROUP 35–72—Typewriters

The following patent relates to establishments engaged in manufacturing typewriters and parts.

Patent No.	Title of Invention	Inventor	Agency
2,266,066	Carriage Shift for Typewriters	Norton, C. E.	TVA

SUBGROUP 35–76—Scales and balances

The following patents relate to establishments engaged in manufacturing weighing devices of all types, including those with automatic computing mechanisms and coin-operated scales.

Patent No.	Title of Invention	Inventor	Agency
2,352,906	Spring Balance	Lyons, W. J.	USDA
2,396,700	Spring Loading Machine	Holcomb, N. P.	Army

SUBGROUP 35–84—Mechanical cleaning apparatus

The following patents relate to establishments engaged in manufacturing vacuum and other types of mechanical cleaners for domestic and industrial use.

Patent No.	Title of Invention	Inventor	Agency
2,514,142	Hydraulically Driven Oscillatory Brush.	Reid, J. D.	AEC
2,601,746	Apparatus for Cleaning Cans	Clark, T. F.	USDA

SUBGROUP 35–85—Refrigerators, refrigeration machinery, and complete air-conditioning units

The following patents relate to establishments engaged in manufacturing mechanical and absorption refrigerators for commercial, industrial, and household use, refrigeration machinery, ice-making machinery and equipment, refrigerated showcases and cabinets, and complete air-conditioning units for domestic, commercial, and industrial use.

Patent No.	Title of Invention	Inventor	Agency
2,164,362	Freezing Foods	Taylor, R. B.	TVA
2,172,417	Washing Food with Refrigerant	Taylor, R. B.	TVA
2,172,418	Separating Refrigerant from Frozen Foods.	Taylor, R. B.	TVA
2,225,669	Purification of Refrigerant	Taylor, R. B.	TVA
2,304,860	Apparatus for Freezing Foods	Taylor, R. B.	TVA
2,324,517	Apparatus for Freezing Foodstuffs	King, D. W.	TVA
2,342,706	Freezing Foodstuff	Tankersley, J. O.	TVA
2,396,474	Desiccator Unit	Riley, J. F.	Navy
2,441,730	Method and Means for Preservation of Blood Plasma and the Like by Freezing and Drying.	Strumia, M. M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,477,605	Process for Preserving Foods	Howard, L. B. Ramage, W. D. Rasmussen, C. L.	USDA
2,571,014	Purification of a Confined Atmosphere by a Process of Refrigeration.	Colburn, A. P. Dodge, B. F.	Navy

SUBGROUP 35–86—Measuring-and-dispensing pumps

The following patents relate to establishments engaged in manufacturing measuring-and-dispensing pumps commonly used in service and filling stations for dispensing gasoline, oil, and grease, including grease guns. Pumps, compressors, and pumping equipment for general industrial use are classified in Subgroup 35–61.

Patent No.	Title of Invention	Inventor	Agency
2,489,028	Positive Shutoff Dispensing Nozzle	Carver, V. D. Graham, C. B.	AEC
2,492,365	Dispensing Nozzle	Miller, O. E.	AEC
2,540,941	Latch Mechanism	Graham, C. B. Carver, V. D.	AEC
2,551,541	Improved Vacuum Pumping Method with Mechanical Oil Sealed Pumps.	Knox, F. A.	AEC

SUBGROUP 35–91—Valves and fittings (except plumbers' valves)

The following patents relate to establishments engaged in manufacturing valves for controlling the flow of liquids or gases in pipes and mains, and for machinery, including parts and fittings for such valves. Plumbers' valves, faucets, spigots, and similar plumbers' supplies are classified in Subgroup 34–31.

Patent No.	Title of Invention	Inventor	Agency
2,104,042	Automatic Control Mechanism for Fish Lock Drainage.	Jolliffe, J. P.	Army
2,420,241	Torpedo Control Valve	Hammond, J. H.	Navy
2,441,044	Switching and Timing Unit for Pneumatic Relays.	Tate, K. L.	AEC
2,442,599	Glass Magnetic Stopcock	Herrick, C. E. Liberatore, L. C.	AEC
2,442,622	Seal	Starr, A. M.	AEC
2,442,625	Packless Valve	Thomas, J. B.	AEC
2,446,385	Adjusting Arrangement for Pneumatic Relays of the Force-Balance Type.	Newell, F. B.	AEC
2,454,574	Flow Regulator	Shoemaker, D. P.	Navy
2,464,018	Valve	Hein, W. C. Winchester, L.	AEC
2,475,585	Excess Flow Valve	Baird, C. E.	Int
2,489,028	Positive Shutoff Dispensing Nozzle	Carver, V. D. Graham, C. B.	AEC
2,492,365	Dispensing Nozzle	Miller, O. E.	AEC
2,495,081	Packless Valve	Thomas, J. B.	AEC
2,501,461	Valve	Wirth, H. E.	AEC
2,515,068	Fuel Valve	Young, C. T.	Navy
2,515,159	Quick Operating Valve	Zurcher, E.	AEC
2,521,891	Valve	Beams, J. W.	AEC
2,531,802	Filter and Valve Mechanism	Boyer, R. Q.	AEC
2,533,491	Valve Control Mechanism	Abbott, T. A. McMahon, J. B.	AEC
2,536,602	Automatic Flange System	Goett, J. J.	AEC
2,555,996	Valve	Pontius, R. B.	AEC
2,575,775	Diaphragm Valve	Teeters, W. O.	AEC
2,586,984	Apparatus for Governing Fluid Flow	Nier, A. O. Thorness, R. B. Stevens, C. M.	AEC
2,588,369	Apparatus for Use in the Treatment of Oil, Gas, and Gas-Condensate Wells.	Eilerts, C. K.	Int
2,608,996	Glass Valve	Forman, R.	Com
2,612,389	Valved Pipe Coupling	MacGlashan, W. F.	Army
2,620,815	Valve Actuated by Fusible Plug	Margraf, H. J. MacGlashan, W. F.	Army

SUBGROUP 35–92—Fabricated pipe and fittings

The following patents relate to establishments engaged in cutting, threading, bending, and otherwise fabricating pipe and pipe fittings.

Patent No.	Title of Invention	Inventor	Agency
2,421,178	Clamp	Baker, M. H Blackburn, J. F.	Army
2,517,204	Vibration Test Unit for Tube Couplings.	Hartley, E. C	AF
2,519,323	Method of Measuring Corrosion and Erosion.	Creutz, E. C Shank, W. B. Gurinsky, D. H.	AEC

SUBGROUP 35–93—Ball and roller bearings

The following patents relate to establishments engaged in manufacturing ball and roller bearings and parts.

Patent No.	Title of Invention	Inventor	Agency
2,233,403	Method for Indicating the Wear on Bearings and Other Surfaces.	Dickinson, H. C McKee, S. A.	Com
2,458,676	Apparatus for Electroplating	Brenner, A Meites, T. S.	Com

MAJOR GROUP 36—ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES

The patents listed under this title relate generally to establishments engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy.

SUBGROUP 36–11—Wiring devices and supplies

The following patents relate to establishments engaged in manufacturing wiring devices (attachment plugs and caps, convenience outlets, lamp sockets, and receptacles, and snap switches); wiring supplies (pole-line hardware, conductor connectors, overhead trolley-line material, and rail bonds for both propulsion and signal circuits); electrical insulators and insulation materials, conduits and fittings; and lightning arresters.

Patent No.	Title of Invention	Inventor	Agency
2,138,026	Wire Bending and Securing Device	Dempsey, J. B	Com
2,322,229	Pressure Switching	Diamond, H Hinman, W. S.	Com
2,389,132	Method of Attaching Electrical Conductors to Glider Tow Ropes.	Borgelt, E. H	Army
2,398,403	Junction Box for Rope Thimble	Borgelt, E. H	Army
2,398,734	Setback and Centrifugal Switch	Busacker, J. W	Navy
2,414,106	Cable Connector	Kelly, W. I	Army
2,451,516	Seal Terminal	Skobel, M	Army
2,460,304	Connector	Vanderpool, H McGee, K.	Army
2,463,428	Coaxial Line Termination	Rieke, F. F	Army
2,468,125	Standing Wave Indicator	Silver, W. T	Army
2,486,432	Conductivity Cell for Viscous Materials.	Otto, E. M	Com
2,505,519	Pressure-Compensated Telephone Unit.	Beranek, L. L	Army
2,509,009	Insulating Column Structure	McKibben, J. L	AEC
2,516,344	Rectifier	Ross, D. W Hopkins, J. J.	Navy
2,535,064	Resonant Grounding Device for Alternating-Current Circuits.	Harrison, L. H	Int
2,535,886	Electronic Switch	Baker, W. R Kerns, Q. A.	AEC
2,537,983	Electrical Insulating and Potting Composition.	Franklin, P. J	Army
2,543,425	Squeezable Wave Guides for Line Stretching.	Strandberg, M. W	Navy
2,543,740	Clamp	Ridgely, N. R Sohn, W. H.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,552,477	Temperature Time Integrator	Cole, J. W.	Navy
2,555,118	Flexible Wave Guide Type Transmission Line.	Coyle, J. E. Younker, E. L.	Army
2,558,385	Branch Guide Coupler	Purcell, E. M.	Army
2,558,485	Cable Testing Systems and Methods	Gow, J. D.	AEC
2,558,763	Flexible Members	Lee, N. E.	Army
2,561,130	Wave Guide Coupling	McClellan, C. E.	Navy

SUBGROUP 36–12—Carbon and graphite products for use in the electrical industry

The following patent relates to establishments engaged in manufacturing lighting carbons; carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; and other carbon, graphite, and metal-graphite products.

Patent No.	Title of Invention	Inventor	Agency
2,243,096	Electrode Seal	Hardin, S. A.	TVA

SUBGROUP 36–13—Instruments for indicating, measuring, and recording electrical quantities and characteristics

The following patents relate to establishments engaged in manufacturing pocket, portable, panelboard, and graphic recording instruments for measuring electricity, such as volt meters, ammeters, watt meters, watthour meters, demand meters, and other meters and indicating instruments. Included are meter transformers, and analyzers for testing the electrical characteristics of internal-combustion engines, radio apparatus, etc.

Patent No.	Title of Invention	Inventor	Agency
2,201,979	Constant Voltage Rectifier Circuit	Christie, A.	USDA
2,273,850	Specific Gravity Recording System	Ewald, P.	TVA
2,368,678	Test Probe	Gerst, H. M. Pitinsky, M. Shriro, M.	Army
2,371,244	Oscillosphygmograph	Lax, H.	HEW
2,391,917	Band Switch Mechanism for Transmission Lines.	Newkirk, T. A.	Army
2,395,309	Direct Reading Sound Pressure Meter	Wiener, F. M. Wallace, R. L.	Navy
2,395,902	Electronic Chronoscope for Measuring Rates of Detonation.	Nisewanger, C. R. Brown, F. W.	Int
2,401,288	Method of and Apparatus for Measuring Radiations.	Morgan, R. H. Hodges, P. C.	Army
2,401,289	Photoelectric Timer for Roentgen Photography.	Morgan, R. H. Hodges, P. C.	Army
2,402,682	Mounting Device	Shriro, M. A. Hindin, A.	Army
2,416,557	Electro-Acoustic Transducer Having Damping Slots.	Wiener, F. M.	Army
2,418,480	Asymmetrically Conducting Network	Prichard, A. C. Myers, I. O.	Army
2,418,964	Electro-Mechanical Apparatus	Arenberg, D. L.	Army
2,423,306	Transmission Line	Forbes, G. D. Shapiro, H.	Army
2,423,447	High-Frequency Ammeter and Power Meter.	Grimm, H. H.	Army
2,423,819	Vacuum Tube with Coupling-Feed-Back-Electrode Arrangement.	Chevigny, P. G.	Army
2,424,976	System for Detecting Sources of Radiant Energy.	Goley, M. J. Zahl, H. A.	Army
2,429,811	Tube with Tunable Coaxial Resonator.	Guarrera, J. J.	Army
2,429,843	Device for Measuring Electromagnetic Field Intensity.	Redheffer, R. M.	Army
2,429,844	Pulse Delay Circuits	Rothman, M. I. Neiman, W. H.	Army
2,432,199	Wheatstone Bridge Meter	Kamm, G. N.	Army
2,434,263	Determining Upper Air Wind Conditions by Radio Direction Finding.	Diamond, H. Dunmore, F. W. Hinman, W. S.	Com
2,436,084	Ionization Chamber	Weller, B. L.	AEC
2,436,145	Nephelometer for Assaying Penicillin	Johnson, F. H.	Army
2,436,512	Pulse Frequency Selective Recorder	Hollywood, J. M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,437,476	Differential Twin Chamber Neutron Meter.	Parker, H. M	AEC
2,439,394	Grommet Insulating Bushing Unit	Lanzalotti, S Skobel, M.	Army
2,440,167	Differential Ion Chamber	Broxon, J. W Jesse, W. P.	AEC
2,440,308	Oscillator Structure	Storck, E. A	Army
2,440,679	Voltage Measuring Device	Fountain, C. R	Army
2,440,693	Method for Determining the Subterranean Extension of Geologic Bodies.	Lee, F. W	Int
2,441,562	Continuous Reading Thermocouple Temperature Measuring Device for Rotary Vessels.	Chase, L. R Dimick, R. H.	Int
2,442,314	Geiger Counter Improvement	Reid, A. F	AEC
2,442,619	Radio-Frequency Power Meter	Schmitt, O. H	Navy
2,443,365	Support for Geiger-Mueller Counters	Wakefield, E. H	AEC
2,443,603	Analysis of Electrical Transients	Crost, M. E	Army
2,444,890	Self-Synchronous Frequency Divider	Hite, G Whitham, G. E.	Navy
2,447,336	Fluxion Meter	Hisserich, C. A	Navy
2,448,533	Consistency Meter	Laurence, H. W	Int
2,449,524	Oscilloscope Device	Witherby, T. H Farnsworth, H. E.	Army
2,451,953	Meter Protection Circuit	Ingram, C. S	AEC
2,452,156	Float Position Indicator	Schover, D. S	AEC
2,454,841	Apparatus for Detecting the Presence and Position of an Invisible Body by Infra-Red Radiation.	Sackville, W	Army
2,455,345	Capacitive Angular Velocity Measuring Device.	Watt, B. E	Navy
2,456,426	Mass Spectrometer System	Ney, E. P Nier, A. O.	AEC
2,458,033	Microphonics Tester	Sterner, J. E	Navy
2,458,830	Modulation Indicator	Byrne, J. E	Army
2,459,185	Radiant Energy Detector	Sackville, W	Army
2,462,140	Portable Battery-Powered Gamma Ray Counting Rate Meter of High Sensitivity.	Spicer, H. C	Int
2,462,885	Pulsed Oscillator	Moore, J. R	Army
2,463,436	Bridge for Measurement of Radio-Frequency Power.	Sorvaag, C. M	Army
2,463,480	Compensated Radio-Frequency Power Measuring Bridge.	Fenn, W. H Griesheimer, R. N. Keuffel, J. W.	Army
2,465,683	Radio-Frequency Power Measuring Bridge.	Griesheimer, R	Army
2,465,886	Electrical Measuring Apparatus	Landsvork, O Wollan, E. O.	AEC
2,465,938	Radiation Measuring Device	Shonka, F. R	AEC
2,466,615	Photoelectric Apparatus for Measuring Lap Uniformity having Means to Minimize Tension on the Lap.	Rusca, R. A Sens, C. L.	USDA
2,466,746	Means for Measuring Resistance at High Voltage.	Shive, S. L	Army
2,468,688	Impedance Matcher for Radio-Frequency Bridges.	Schmitt, O. H	Army
2,470,618	Electrical Apparatus	Holden, L. T	Army
2,472,204	High-Frequency Concentric Line Oscillator.	Stephenson, J Fubini, E. Kriegel, H. C.	Army
2,472,365	Alpha Particle Counting	Borkowski, C. J	AEC
2,472,380	Screen for Optical Displacement Gauges.	Long, J. H	Navy
2,473,448	Oscillator	Rieke, F. F	Army
2,474,463	Wiring Pencil	Burrell, E	Navy
2,475,138	Device for Measuring Thermal Conductivity.	Hood, C. B Jones, W. Johnston, H. L.	AEC
2,475,387	Ordnance Pressure Time Recorder	Golden, S	Army
2,477,507	Electrical Pressure Gauge	Africano, A	Navy
2,477,526	Thermometric Instrument for Measuring Impregnite in Cloth.	Perley, G. A	Navy
2,479,271	Ionization Chamber Circuit	Shonka, F. R	AEC

Patent No.	Title of Invention	Inventor	Agency
2,479,600	Ionization Chamber	Borkowski, C	AEC
2,479,699	Apparatus for Magnetic Measurements.	Powell, W. M	AEC
2,479,808	Electromagnetic Apparatus for Measuring Projectile Velocity During Penetration.	Beth, R. A	Army
2,480,872	Beam Tube Receiver Input	Moore, J. R	Army
2,481,506	Fast Neutron Meter	Gamertsfelder, C. C	AEC
2,481,964	Fast Neutron Meter	Wollan, E. O	AEC
2,483,125	Phase Shifting Potentiometer	Cummerow, R Davis, L. K.	Navy
2,483,981	Dynamic Condenser	Swank, R. K Palevsky, H.	AEC
2,485,469	Method and Means for Detecting Ionization.	Rossi, B. B Allen, J. S.	AEC
2,485,470	Method and Apparatus for Control of Beam Energy.	Baker, C. P	AEC
2,485,516	Shallow Plane Proportional Counter	Thompson, R. W	AEC
2,486,432	Conductivity Cell for Viscous Materials.	Otto, E. M	Com
2,486,976	Pressure Measuring Device	Perret, W. R	AEC
2,489,312	Oscilloscope Sweep Circuit	Pacini, H. P	Army
2,490,298	Radiation Detecting Apparatus	Ghiorso, A Gordon, C. M.	AEC
2,491,220	Neutron Detector	Segre, E. G Wiegand, C. E.	AEC
2,491,320	Neutron Detectors and Method of Making Same.	Koontz, P. G	AEC
2,493,336	Peak Reading Voltmeter	Burger, M. J Collins, R. W. Cosler, A. S.	Navy
2,493,935	High Energy Neutron Counter	Segre, E. G Wiegand, C. E.	AEC
2,494,641	Radiation Counter	Anderson, H. L Koontz, P. G.	AEC
2,495,650	Coincidence Proportional Counter	Blair, J. M Hush, J. M.	AEC
2,496,123	Ionization Chamber	East, J. K English, S. G.	AEC
2,496,819	Pulse Generator	Simpson, A. R	AEC
2,496,886	Radiation Alarm and Measurement Device.	Molloy, E. W Hinch, W. H.	AEC
2,497,823	Radiation Measuring Device for Air Filters.	Molloy, E. W	AEC
2,498,032	Thermal Circuit Breaker	Dell, A. H Screb, J. H.	Navy
2,498,579	Beam Blanking and Sweep Control	Roberts, G. A	Army
2,498,841	Ion Source	King, P	AEC
2,498,997	Photoelectric Inclinometer and Accelerometer.	McLean, W. B Swift, I. H.	AF
2,499,288	Vacuum Analyzer	Backus, J. G	AEC
2,499,289	Ion Generator	Backus, J. G	AEC
2,499,320	Ion Generator	Loevinger, R	AEC
2,499,830	Air Proportional Counter	Molloy, E. W	AEC
2,500,492	Apparatus for Handling Materials	Henriques, F. C	AEC
2,501,110	Indicating Circuit	Walker, R. M	Army
2,504,530	Vacuum Leak Detector Method	Jacobs, R. B	AEC
2,505,919	Proportional Counter	Simpson, J. A	AEC
2,506,419	Method and Apparatus for Detecting Ionizing Particles.	Graves, E. R	AEC
2,506,431	Pressure Measuring Device	Perret, W. R Davis, T.	AEC
2,506,433	Magnetic Flux Measuring Apparatus	Plesset, E. H	AEC
2,506,435	Radiation Measurement	Rossi, B. B Allen, J. S.	AEC
2,506,944	Neutron Meter	Stauffer, L. H Snyder, T. M.	AEC
2,509,394	Vacuum Tube Flux Meter	Kinslow, R	AEC
2,509,669	Mechanical Coupling	Borst, L. B	AEC
2,509,700	Radioactivity Measuring Device	Simpson, J. A	AEC
2,510,930	System for Measuring Limited Current Changes.	MacLeish, K. G	AEC

Patent No.	Title of Invention	Inventor	Agency
2,513,281	Line-Operated Vacuum Tube Voltmeter.	Buras, E. M. Reid, J. D.	USDA
2,513,805	Detecting Device	Kanne, W. R.	AEC
2,514,135	Radiation Detector	Neil, H. G.	AEC
2,514,284	Photo Electric Measuring Device	LePage, W. R.	Navy
2,517,469	Method and Apparatus for Measuring Alpha Particle Radiation.	Dodson, R. W. Beamer, W. H.	AEC
2,518,926	Radio-Frequency Power Measuring Circuit.	O'Neal, R. D.	Army
2,519,007	Radiation Counter	Wilson, V. C.	AEC
2,519,407	Conduit Tester	Shive, S. L.	Army
2,519,807	Ionization Pressure Gage	Yeater, M. L.	Army
2,521,133	Secondary Electron Multiplier	Snell, A. H. Miller, L. C.	AEC
2,521,656	Ionization Chamber	Segre, E. G. Chamberlain, O.	AEC
2,521,904	Control-Transfer Circuit	Doak, J. B.	Navy
2,521,917	Micrometer	Holliday, C. Hamilton, A. A.	Navy
2,521,918	Decelerometer	Lindvall, F. C. Hudson, D. E.	Navy
2,523,464	Electric Thrust Gauge	Golden, S. Comley, E. A. Alexander, N. E.	Navy
2,524,379	Neutron Velocity Selector	Fermi, E.	AEC
2,524,692	Scaling Circuit	Bradley, W. H.	AEC
2,527,699	Tunable Oscillator	Bowen, D. B. Clogston, A. M.	Army
2,527,730	Automatic Oscillation Control	Hoglund, R. H.	Army
2,527,770	Magnetron Pilot Cavity Resonator	Smith, W. V.	Army
2,527,773	Ultra High Frequency Modulation Circuit.	Stephenson, J. G. Webster, R. R.	Army
2,528,575	Altitude Responsive Control Device	Broadbent, J. H.	Navy
2,529,666	Pulse Height Analyzer	Sands, M. L.	AEC
2,530,111	Method and Means for Indicating Ionization Pressure.	Yeater, M. L.	Army
2,530,176	Apparatus for Measuring Local Variations in Flux Density in a Magnetic Field.	Powell, W. M.	AEC
2,530,178	Fluxmeter	Rathkamp, W. R.	AEC
2,531,106	Pocket Radiation Alarm	Brown, R. J. Weiss, H. G.	AEC
2,531,144	Coincidence Proportional Counter	Manley, J. H.	AEC
2,531,414	Electrical Pressure Measuring Device.	Engvall, L. R.	Int
2,531,683	Stabilized Line-Tuned Oscillator	Izenour, G. C.	Navy
2,531,693	Line-Tuned Oscillator	Lansman, P. S.	Navy
2,531,713	Line-Tuned Oscillator	Towner, O. W.	Navy
2,531,807	Magnetic Measuring Apparatus and Method.	De Pangher, J.	AEC
2,531,811	Coulombmeter	Mannel, J. E.	AEC
2,532,307	Signal Responsive System	Hess, G. C.	Army
2,532,503	Electronic Counting Circuits	Kennedy, J. W. Baker, W. R. Weigand, C. E.	AEC
2,532,545	Magnetron Oscillator	Everhart, E.	Army
2,532,546	Moving Target Indicating System	Forbes, G. D.	Army
2,532,566	Photoelectric Gate Control for Pulse-Echo Systems.	Millman, J.	Army
2,532,576	Electrical Apparatus	Sherwin, C. W. Straus, H. A.	Army
2,532,874	Detection Apparatus	Anderson, H. L.	AEC
2,532,956	Air Proportional Counter	Simpson, J. A.	AEC
2,533,029	Odograph	McNish, A. G. Tuckerman, B.	Army
2,535,032	Radio-Frequency Mass Spectrometer	Bennett, W. H.	Com
2,536,991	Radiation Detector	Wollan, E. O. Pardue, L. A.	AEC
2,538,158	Magnetic Deflection Gauge	Long, J.	Navy
2,538,632	Combination Beta and Gamma Chamber.	Tompkins, E. R.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,538,781	Radiant Energy Control Device	Herson, J. S	AF
2,539,495	Antenna Output Indicator	Tomberg, S	Army
2,540,764	Magnetron Modulation Circuit	Steigerwalt, O. I	Army
2,541,422	Telemetric Tachometer	Kirkland, G. I Waters, G. E.	Navy
2,544,685	Testing Device	Jackson, F. H	Navy
2,544,696	Alternating Current Measuring Devices.	Lantz, M. J	Int
2,544,832	Variable Frequency Tank Circuit	Hadley, L. L	Navy
2,546,106	Apparatus for Regulating High Voltage.	Morrison, K. G	AEC
2,547,411	Electrical Apparatus	Rambo, W. R	Army
2,548,449	Sensitivity Modulator	Staub, H. H	AEC
2,548,452	Corona Triode Voltage Regulator	Turner, C. M	AEC
2,548,808	Continuous-Strip Anode for Magnetrons.	Nichols, N. P	Army
2,548,833	Generator Testing Device	Van Wambeck, S. H	Army
2,548,836	Electromagnetic Field Phase Determining Apparatus.	Worthington, H. R	Army
2,549,385	Test Set for Radar Apparatus	Rapuano, R. A	Navy
2,550,488	Radiation Counter	Marsh, C. R	AEC
2,551,531	Radiation Counters	Freedman, M. S	AEC
2,552,477	Temperature Time Integrator	Cole, J. W	Navy
2,554,933	Photo-Multiplier Circuit	Wouters, L. F	AEC
2,556,768	Neutron Detector	McKibben, J. L	AEC
2,557,659	Indicator	Ingraham, E. C	Navy
2,558,371	Automatic Frequency Control System.	Nibbe, G. H	Army
2,558,406	Linear Modulation Circuit	White, W. D	Army
2,558,463	Tunable Cavity Oscillator	Reed, J. C	Army
2,558,485	Cable Testing Systems and Methods	Gow, J. D	AEC
2,558,919	Methods and Means for Measuring Radiation.	Zinn, W. H	AEC
2,558,925	Capacitance Attenuator	Bowman, D. F	Navy
2,559,259	Method of Making a Source of Beta Rays.	Raper, J. R	AEC
2,560,132	Unbalanced Magnetometer	Schmitt, O. H	Navy
2,560,166	Pulse Analyzer	Glenn, W. E	AEC
2,561,234	Circuit for Distortion Measurement	Saunders, N. B	AF
2,562,637	Position Indicating Control Apparatus.	Park, C. W Kilpatrick, J. C.	AEC
2,562,645	Electrical Scaling Circuit	Robinson, S Schloss, B.	AEC
2,563,626	Ion Source	Bashkin, S Stein, F. S. Binns, J. E. Rice, C. E.	AEC
2,563,729	Method and Apparatus for Control of Boundary Between Electrolytic Fluids.	Longworth, L. G	AEC
2,564,626	Measuring Device and Method of Measuring.	MacMahon, A. M Snell, A. H.	AEC
2,565,799	Wave Train Magnetometer	Brattain, W. H	Navy
2,565,922	High-Frequency Thermistor Wattmeter.	Howard, R. A	Navy
2,566,020	High-Frequency Detecting Device	Penn, W. H	Navy
2,566,684	Segmented Ionization Chamber	Tobias, C. A	AEC
2,567,587	Method and Apparatus for Measuring Capacitance.	Wilchinsky, Z. W	Navy
2,567,668	Apparatus for the Measurement of Radioactivity.	Hecomovich, J	AEC
2,567,734	Signal Generator	Sayre, D	Navy
2,569,129	Spectrum Analyzer	Kamm, G. N	Navy
2,569,232	Filter	DeLiban, R	AEC
2,569,499	Wire-Resistance Gauge for Measuring Large Strains.	Shoub, H	Navy
2,569,646	Electrical Simulator	Wade, E. J Simpson, J. W.	AEC
2,569,949	Resistance Strain Gauge Potentiometer Bridge Circuit.	Prescott, R	Navy

Patent No.	Title of Invention	Inventor	Agency
2,570,984	Ambient Pressure-Responsive Clamping Means.	Reyenga, A. J.	AEC
2,571,055	Traveling Detector for Waves Propagated Through a Wave Guide.	Nordsieck, A. T.	Army
2,571,302	Sampler for Highly Radioactive Substances.	Smith, W. Q.	AEC
2,571,439	System for Determining Tube Characteristics.	Glass, F. M.	AEC
2,572,600	Mass Spectrograph	Dempster, A.	AEC
2,573,069	Method and Apparatus for Measuring Strong Alpha Emitters.	Segre, E. G.	AEC
2,573,649	Gas Analyzer	Nier, A. O.	AEC
2,573,823	Altimeter Actuated by Cosmic Rays	Barghausen, J. W. Van Allen, J.	Navy
2,574,438	Computer Using Magnetic Amplifier	Miller, G. H. Rossi, B. Sack, H. S. Beyer, R. T.	Navy
2,574,632	Radiation Detection and Measuring Apparatus and Method.	Engelkemeir, D. W. Sugarman, N.	AEC
2,574,841	Timing Apparatus	Powell, W. M. Hughes, A. W.	AEC
2,576,060	Radio-Frequency Calorimeter Wattmeter.	Wolf, J. M.	Navy
2,576,330	Ionization Gauge	Beringer, E. R.	Navy
2,576,344	Microwave Wattmeter for Wave Guides.	Howard, R. A.	Navy
2,576,600	Devices for Generating Neutrons	Hanson, A. O.	AEC
2,576,601	Method of Accelerating Ions	Hays, E. E.	AEC
2,576,616	Monitor for Fission Gases	Livingston, R. Levy, H. A.	AEC
2,577,066	Pressure Measuring Device	Arnold, W. A.	AEC
2,577,540	Wave Guide T Bridge Detecting Apparatus.	Pound, R. V.	Army
2,577,543	Power Measuring System	Saad, T. S.	Army
2,578,908	Electrostatic Generator	Turner, C. M.	AEC
2,579,220	Apparatus for Indicating Ballast Changes Necessary to Maintain Submersed Submarines in Trim.	Vine, A. C.	Navy
2,579,231	Electromagnetically Operated Counter.	Goldberg, H. D. Goldberg, M. I.	AEC
2,579,994	Neutron Density Indicator Device	Zinn, W. H.	AEC
2,580,457	Measurement Apparatus	Norris, S. E.	Int
2,582,596	Phase Detector Circuit	MacRae, D.	Navy
2,582,851	Transient Analyzer	Ruge, A. C.	Navy
2,583,121	Mass Spectrometer Ion Source	Reynolds, F. L.	AEC
2,585,639	Compensated Electron Discharge Measuring Device.	Elmore, W. C.	AEC
2,585,649	Reaction Comparision Apparatus	Hanson, A. O.	AEC
2,585,702	Spectrometer	Thompson, R. W. Leland, W. T.	AEC
2,585,901	Method of Isotope Analysis	Dieke, G. H.	AEC
2,586,984	Apparatus for Governing Fluid Flow	Nier, A. O. Thorness, R. B. Stevens, C. M.	AEC
2,587,426	Pulse Forming Network	Aiken, W. R.	AEC
2,587,919	Electrical Apparatus for Simulating the Time Dependent Response Characteristic of Neutronic Reactors.	Straus, H. A. Bell, P. R. Murray, F. H.	AEC
2,588,789	Neutron Detector	Zinn, W. H.	AEC
2,590,057	Half-Life Determining Method	Wiegand, C. E.	AEC
2,590,826	Oscillator Controlled Relay Circuits	Schenck, R. T.	AEC
2,590,925	Proportional Counter	Borkowski, C. J. Fairstein, E.	AEC
2,591,247	Coincidence Amplifier	Farnsworth, H. D.	AEC
2,591,998	Leak Detector	Baker, W. R.	AEC
2,592,416	Indicating Devices for Radioactivity Intensity.	Groth, E. J.	AEC
2,593,948	Distributed Coincidence Circuit	Wiegand, C. E. Chamberlain, O.	AEC
2,594,870	Indicator	Van Voorhis, S. N.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,595,263	Apparatus for Measuring the Phase Shift Between the Input and Output Voltages of a Circuit Under Test.	Ingalls, C. E	Navy
2,595,550	Radiation Counter	Simpson, J. A	AEC
2,595,611	Ionization Gauge	Simpson, K. M Baker, W. R. Kerns, Q. A.	AEC
2,596,080	Ionization Chamber	Raper, J. R Zirkle, R. E.	AEC
2,596,529	Vibration Measuring Device	Clarke, H. F	AEC
2,596,530	Vibration Measuring Device	Clarke, H. F	AEC
2,596,531	Vibration Measuring Device	Clarke, H. F	AEC
2,597.327	Measuring Device	Hollingsworth, L. M.	Army
2,597,535	Radioactive Assay Apparatus	Segre, E. G	AEC
2,598,215	Ionization Chamber	Borkowski, C. J Firminhac, R. H.	AEC
2,599,166	Method of Identifying Radioactive Compounds.	Dempster, A. J	AEC
2,599,944	Absorbent Body for Electromagnetic Waves.	Salisbury, W. W	Navy
2,601,583	Radiation Measuring Instrument	Ballou, C. O	AEC
2,601,637	Pocket Ionization Chamber	Rose, J. E Hinspater, E. W.	AEC
2,601,678	Measuring Apparatus	Beatty, C. G	Navy
2,602,827	Wave Guide Incident Wave Measurement.	Miller, T	Navy
2,602,841	Protective Relay	Applegate, L. M Spaulding, L. R.	Int
2,602,884	Field Strength Recorder	Schmitt, O. H	Navy
2,602,898	Ion Intensity Control Mechanism for Mass Spectrometers.	Inghram, M. G Rustad, B. M.	AEC
2,602,904	Radiation Device and Method of Construction.	Simpson, J. A	AEC
2,605,332	Electronic Analyzer	Parson, J. H	AEC
2,605,340	Telemetering System	Disney, V. H	Navy
2,605,341	Directional Indicator System	Vacquier, V. V Adkins, J. N.	Navy
2,605,416	Directive System for Wave Guide Feed to Parabolic Reflector.	Foster, J. S	Navy
2,605,450	Computer Automatic Reset	Nettleton, L. A Sommers, H. S.	Navy
2,606,716	Continuous Integrating Demand Meter.	Owens, R. J	TVA
2,608,661	Means for Measuring Radiation	Zinn, W. H	AEC
2,609,422	Indicating Device	Hulstede, G. E	Army
2,611,115	Automatic Curve Follower	Johnston, L. H	Army
2,613,235	Mega Voltmeter	Grunsky, C. E	AEC
2,613,236	Voltage Measuring Apparatus	Palevsky, H Swank, R. K.	AEC
2,613,237	Dosimeter	Beckman, A. O Herd, H. H. Robinson, A. D.	AEC
2,613,531	Diffusion Measuring Meter	Bacon, C. G	AEC
2,614,416	Force Measuring System Employing Piezocapacitors.	Hollmann, H. E	Navy
2,615,063	Current Measuring Device	Brown, C. J	AEC
2,615,129	Synchro-Cyclotron	McMillan, E. M	AEC
2,615,135	Mass Analyzing Apparatus	Glenn, W. E	AEC
2,615,249	Atomic Air Burst Direction Finder	Allard, G. A	AEC
2,615,967	Time-delay Relay Testing Device	Gould, C. B	AEC
2,616,052	Fast Neutron Dosimeter	Hurst, G. S	AEC
2,616,053	Method and Apparatus for Measuring Beam Current.	Holloway, M. G	AEC
2,617,042	Coincidence Circuit	Wouters, L. F	AEC
2,617,946	Radiation Detector Circuit	Weller, B. L	AEC
2,617,973	Regulating System	Wolff, J. L Aldrich, D. F.	AEC
2,619,601	Radioactivity Survey Apparatus	Zollers, S. M	AEC
2,620,256	Analyzer	Kerns, Q. A Whitcombe, L. W. Brown, E. E.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,622,130	Automatic Cable Tester or Fault Analyzer Means.	Kabell, L. J Richards, R. A. Dyer, A. L.	AEC
2,622,208	Radioactive Particle Counting	Bernstein, W Ballentine, R.	AEC

SUBGROUP 36–14—Motors, generators, and motor-generator sets

The following patents relate to establishments engaged in manufacturing electric motors and generators other than those specially designed for automotive use; and motor-generator sets and turbogenerators, whether powered by electric motors, internal-combustion engines, steam, or water power.

Patent No.	Title of Invention	Inventor	Agency
2,442,783	Turbine Rotor	Senn, J. A	Army
2,470,797	Aerogenerator	Thomas, P. H	FPC
2,478,221	Servo-Mechanism Synchronizing System.	Alford, A Barkofsky, E. C.	Army
2,480,187	Electrical Apparatus	Gamertsfelder, G. R.	Army
2,482,020	Self-Synchronous Motor System	Meagher, R. E McFarlane, M. D.	Navy
2,496,572	Mechanical Transmission	Williams, C. P	Army
2,511,023	Aerogenerator Tower	Thomas, P. H	FPC
2,515,042	Torque Amplifier	Hughes, E. S Agy, V. L. Duffin, R. J.	Navy
2,516,050	Adjustable Centrifugal Switch	Evans, Q. J Kushner, A. K.	AEC
2,516,308	Variable Speed Induction Motor System.	Forrester, J. W Everett, R. R.	Navy
2,526,671	Voltage Compensator	Kober, W	Army
2,531,830	Voltage Pulse Generator	Simpson, A. R	AEC
2,539,273	Alternating Current Generator	Ringland, W. L	AEC
2,542,659	Drag-Barrel Motor	Gillett, G. D	Navy
2,543,730	Self-Triggering Thyratron Pulse Generator.	Muchmore, T. F	Navy
2,543,902	Radio-Frequency Voltage Supply	Dye, R. C	AEC
2,548,452	Corona Triode Voltage Regulator	Turner, C. M	AEC
2,548,808	Continuous-Strip Anode for Magnetrons.	Nichols, N. P	Army
2,548,816	Frequency Stabilization of Magnetrons.	Preston, W. M	Army
2,548,833	Generator Testing Device	Van Wambeck, S. H.	Army
2,549,389	Sine Wave Potentiometer	Rosenberg, P	Navy
2,551,973	Sleeve-Bearing Assembly	Schuck, R. W	Navy
2,581,862	Insulation	Johnson, J. S Schulman, E L.	AEC
2,582,208	Synchro Exciter	Sherwin, C. W	Navy
2,588,466	Electrical Generator	Barnes, A. H	AEC
2,599,951	Rotary Spark Gap	Stanton, R. S	Navy
2,604,608	Time Wave Generating System	Moore, J. R	Army
2,604,612	Control Circuit	Rudolph, O. B	AEC
2.605,407	Blocking Oscillator	Perkins, G. D	Navy
2,605,422	Pulse Generator	Fredrick, A. H	Navy
2,605,449	Pulse Generator	Schrader, G. F	AEC
2,606,289	Electrical Pulse Generator	Stanton, R. S	Army
2,606,312	Dynamic Motor Braking and Reversing Circuit.	Rogers, J. R	Army

SUBGROUP 36–15—Power and distribution transformers

The following patents relate to establishments engaged in manufacturing power and distribution transformers. Radiofrequency or voicefrequency transformers, coils, or chokes are classified in Subgroup 36–61.

Patent No.	Title of Invention	Inventor	Agency
2,411,357	Split-Phase Servometer Control	Bertram, S	Navy
2,437,892	Voltage Control Circuit	Rambo, W. R	Army
2,439,394	Gormmet Insulating Bushing Unit	Lanzalotti, S. J Skobel, M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,462,935	High Stability Voltage Regulator	Baker, W. R	AEC
2,480,881	Apparatus for Adjusting Capacitor Potential Devices.	Schleif, F. R	Int
2,498,036	Transmission	Grace, W. J	Navy
2,579,542	Pulse Transformer Circuit	Bostick, W. H	Navy
2,585,679	High-Voltage Regulator	Priedigkeit, J	AEC
2,597,853	Unbalanced to Balanced Line Transformer.	Coleman, P. D	Army
2,599,905	Modulator	Fano, R. M	Navy
2,600,057	High-Voltage Multiple Core Transformer.	Kerns, Q. A	AEC
2,613,344	High-voltage Regulator	Neslon, W. H	AEC

SUBGROUP 36–16—Switchgear, switchboard apparatus, and industrial controls

The following patents relate to establishments engaged in manufacturing switchgear, switchboard apparatus, and industrial electrical controls. Important products include power switches, circuit breakers, contactors, and similar switchgear for general industrial application; switchboards and cubicles, control and metering panels, power fuse mountings, and similar switchboard apparatus and supplies; and industrial controls such as motor starters and controllers, electromagnetic brakes, and electronic inspection and gauging apparatus and positioning controls.

Patent No.	Title of Invention	Inventor	Agency
2,104,042	Automatic Control Mechanism for Fish Lock Drainage.	Jolliffe, J. P	Army
2,278,219	Airplane Safety Device	Shanley, F. R	Navy
2,322,229	Pressure Switching	Diamond, H Hinman, W. S.	Com
2,395,782	Unshorting Switch	Good, W. A	Navy
2,410,384	Furnace Control Systems	Lindsay, H. W	AEC
2,411,357	Split-Phase Servomotor Control	Bertram, S	Navy
2,419,828	Setback Switch	Ferris, R. G	Navy
2,420,055	Testing Device	Sanders, E. R	Navy
2,425,010	Coaxial Switch	Smith, H. R	Army
2,431,026	Magnetostrictive Oscillator	Bundy, F. P	Navy
2,431,341	Nonpositional Indicator for Switchboards.	Pereslegin, A	Army
2,438,383	Unshorting Switch	Brode, R. B	Navy
2,439,857	Single Knob Oximeter having Selective Control Means for Multiple Channels.	Millikan, G. A	AF
2,449,862	Centrifugal Circuit Breaker	Rickmeyer, E. W	Navy
2,452,784	Electrical Motor Control System	Noodleman, S	Army
2,458,464	Switch	Busacker, J. W Terry, T. M.	Navy
2,458,465	Centrifugal Switch	Busacker, J. W	Navy
2,458,467	Centrifugal Delay Switch	Dike, S. H	Navy
2,458,470	Centrifugal Unshorting Device	Hafstad, L. R Flett, W. J.	Navy
2,458,474	Centrifugally Operated Control Device.	Jordan, J. D	Navy
2,458,882	Timing Device for High Speed Motion-Picture Cameras.	Stoner, R. G Lampson, C. W.	Army
2,463,527	Measuring Potential Gradients in Space.	Dunmore, F. W	Com
2,466,746	Means for Measuring Resistance at High Voltage.	Shive, S. L	Army
2,466,752	Electrically Fired Rocket Projectile	Uhl, E. G Skinner, L. A.	Army
2,469,274	Electrical Switch	Rein, C	Treas
2,478,303	Power Supply Circuit Means	Mullin, C. J	Army
2,480,194	Electrical Apparatus	Montgomery C. G	Army
2,480,385	Electronic Switch	Sebring, P. B	Navy
2,480,881	Apparatus for Adjusting Capacitor Potential Devices.	Schleif, F. R	Int
2,496,310	Reversing Acceleration Integrator	Rabinow, J	AF
2,498,040	Set-Back Switch	Jordan, J. D Ferris, R. G.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,499,012	Tow Target Carrier	Welsh, J. P. Jewett, J. L.	AF
2,502,837	Position Indicating System	Entz, F. S. Pullis, G. A. Stibitz, G. R.	Army
2,507, 301	Apparatus for Controlling Magnetic Field.	Fulbright, H. W.	AEC
2,509,009	Insulating Column Structure	McKibben, J. L.	AEC
2,509,910	Time-Delay Circuit	Dike, S. H.	Navy
2,509,928	Radio Frequency Switch	Klein, N. E.	Navy
2,516,050	Adjustable Centrifugal Switch	Evans, Q. J. Kushner, A. K.	AEC
2,524,388	Saturable Core Triggered Gap	Kerns, Q. A.	AEC
2,525,108	Erector Magnet Cutout	Wolfert, E. R.	Navy
2,527,718	Phase and Amplitude Responsive Control System.	Grass, A. M.	Army
2,531,065	Apparatus for Changing the Ion Source of a Cyclotron.	Livingood, J. J. Peters, J. V. Streeter, R. A.	AEC
2,535,886	Electronic Switch	Baker, W. R. Kerns, Q. A.	AEC
2,536,808	Fast Impulse Circuits	Higinbotham, W. A.	AEC
2,538,500	Coincidence Circuit	Bess, L.	Navy
2,538,700	Synchronizing Relay	Mershon, C. L.	AF
2,539,100	Bias Supply	Rado, J. A.	Navy
2,539,618	Vibration Responsive Apparatus	Good, W. A. Wenrich, L. W.	Navy
2,540,734	Electrical Apparatus	Huggins, W. H. Richards, P. I.	Army
2,541,940	Electronic Circuit	Rossi, B. B. Staub, H. H.	AEC
2,542,631	Variable Timing Circuit	Crain, H. M.	Navy
2,543,434	Marker Circuit	Bryan, J. D. Starr, M. A.	Army
2,543,445	Impulse Generating Apparatus	Doolittle, H. D.	Army
2,543,462	Pulse Equalizer	Longmire, C. L.	Army
2,543,491	Pulse Integrating Circuits	Froman, D. K.	AEC
2,545,595	Linear Accelerator	Alvarez, L. W.	AEC
2,545,924	Fast Impulse Circuits	Johnstone, C. W.	AEC
2,548,790	Shaft Rotation Indicating Circuit	Higinbotham, W. A. Slack, F. F.	Army
2,548,818	Thermionic Overvoltage Protection Circuit.	Rambo, W. R.	Army
2,550,878	Pulsing Circuit	Staub, H. H.	AEC
2,551,529	Pulse Amplitude Discriminator	Davis, F. J. Curtiss, L. F.	AEC
2,555,147	Electrical Circuit	Meagher, R. E.	Army
2,557,644	Electronic Switching Circuit	Forbes, G. D.	Army
2,557,686	Wave Guide with Electrical End Termination.	Rado, J. A.	Navy
2,562,342	Transmitter Output Coupling Circuit.	Steigerwalt, O. I.	Army
2,562,637	Position Indicating Control Apparatus.	Park, C. W. Kilpatrick, J. C.	AEC
2,566,247	Plotter	Pierce, F. Brettell, G. A.	Navy
2,567,682	Carbon Pile Gyro Pick-Off	Silberstein, G. P.	Navy
2,568,061	Rotary Shaft Driven Tappet	Evans, Q. J.	AEC
2,569,646	Electrical Simulator	Wade, E. J. Simpson, J. W.	AEC
2,573,280	Continuously Variable High-Voltage Power Supply.	Schmidt, L. M.	Navy
2,574,841	Timing Apparatus	Powell, W. M. Hughes, A. W.	AEC
2,575,360	Magnetic Fluid Torque and Force Transmitting Device.	Rabinow, J.	Army
2,577,696	Electric Positioning Proportional Floating Control.	Abbott, T. A. McMahon, J. B.	AEC
2,579,220	Apparatus for Indicating Ballast Changes Necessary to Maintain Submersed Submarines in Trim.	Vine, A. C.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,580,453	Remote-Control System for Aircraft.	Murray, P. R. Bright, D. C.	Army
2,582,163	Electrometer for Pocket Chambers	Rich, T. A. Bigelow, J. E.	AEC
2,582,208	Synchro Exciter	Sherwin, C. W.	Navy
2,584,816	Electroplating Control System	Sands, M. L.	AEC
2,588,424	Electric Switch	Speaker, H. B.	Army
2,589,547	Water Trip Switch	Hughes, A. V. Rademacher, L. B.	Army
2,589,813	Antenna Positioning System	Hulsizer, R. I.	Army
2,589,816	Balanced Series Loop Sine Wave Oscillator.	Jarmotz, P.	Army
2,594,535	Multiple Channel Electronic Switch	Bertram, S.	Navy
2,599,156	Thermal Neutron Detector Element.	Bousman, H. W.	AEC
2,603,726	Hydraulic Acceleration Integrator Switch.	McLean, W. B.	Navy
2,604,556	Switch	Daly, T. A. Sauer, L. E.	Navy
2,604,590	Cathode-Ray Tube Sweep Circuit	Wilson, V. C.	Navy
2,604,601	Photoelectric Centering Device	Menzel, D. H.	Navy
2,609,527	Voltage Regulator Circuit	Raburn, L. E. Woods, J. P.	Army
2,609,533	Electrical Measuring System	Jacobsen, A. B.	Army
2,611,023	Sound Ranging Computer	Dunn, R. L.	Army
2,611,846	Circuit Breaker	Applegate, L. M.	Int
2,611,847	Cam-Actuated Device	Scott, B. B.	Navy
2,615,967	Time-Delay Relay Testing Device	Gould, C. B.	AEC
2,616,042	Stabilizer Arrangement for Cyclotrons and the Like.	Weeks, R. R.	AEC
2,617,924	Wide Frequency Band Transmit-Receive Switch.	Jones, C. W.	Army
2,617,962	Velocity Modulation Tube	Keuffel, J. W.	Army
2,620,933	Solids Level Control	Lankford, J. D. Trotter, F. J. Taylor, F. W.	Int
2,620,982	Count Predeterminator for Automatic Gas Controls.	James, R. S.	Int

SUBGROUP 36–17—Electrical welding apparatus

The following patents relate to establishments engaged in manufacturing electrical welding apparatus, electrode holders, and other welding apparatus. Gas welding apparatus is classified in Subgroup 35–42.

Patent No.	Title of Invention	Inventor	Agency
2,346,512	Electrode Holder for Spectrographic Analysis.	Scribner, B. F. Corliss, C. H.	Com
2,387,042	Subaqueous Electric Cutting	Seifried, E.	Navy
2,407,850	Subaqueous Electric Cutting	Seifried, E.	Navy
2,431,732	Locating and Welding Fixture	Colbert, E.	AEC
2,431,975	Method of Welding Carbon to Molybdenum.	Yockey, H. P. Nuding, J. M.	AEC
2,613,305	Welding Device	Clack, R. W.	AEC

SUBGROUP 36–19—Electrical equipment for industrial use, not elsewhere classified

The following patents relate to establishments engaged in manufacturing industrial and commercial electrical apparatus and appliances, not elsewhere classified, including electric heating units for furnaces and ovens.

Patent No.	Title of Invention	Inventor	Agency
2,042,971	Method of Making Electrical Resistance Elements and Alloys Therefor.	Thomas, J. L.	Com
2,042,972	Electrical Resistance Element and Alloy Therefor.	Thomas, J. L.	Com
2,095,977	Graphite Resistor	Gould, R. E.	TVA
2,127,542	Electrical Carbonization of Coal	Stitzer, R. B.	TVA
2,165,316	Electrical Resistance Element, Alloy, and Production thereof.	Thomas, J. L.	Com
2,201,979	Constant Voltage Rectifier Circuit	Christie, A.	USDA
2,243,096	Electrode Seal	Hardin, S. A.	TVA

Patent No.	Title of Invention	Inventor	Agency
2,261,974	Electrolytic Resistors	Craig, D. N.	Com
2,285,421	Humidity Variable Resistance	Dunmore, F. W.	Com
2,356,237	Heating Unit	Geller, R. F.	Com
2,396,474	Desiccator Unit	Riley, J. F.	Navy
2,416,347	Method of Making Helical Thread Resistors.	Rector, J. L.	Army
2,435,227	Method and Apparatus for Producing Articles from Powdered Materials.	Lester, H. H.	Army
2,442,380	Method and System for Warming Dry Batteries.	Schrodt, J. P. Craig, D. N. Vinal, G. W.	Com
2,472,369	Rheostat	Davis, L. K.	Navy
2,474,809	Dry-Plate Rectifier Unit	Abbott, J. G.	Army
2,498,034	Dithering Device	Erwood, J.	Navy
2,498,049	Liquid Rheostat	Robertson, J. B.	Navy
2,506,587	Vibrator Type Multiple-Shot Blasting Unit.	Gibson, F. C. Brown, F. W.	Int
2,509,228	Electric Furnace for Phosphate Reduction.	Hardin, S. A.	TVA
2,516,344	Rectifier	Ross, D. W. Hopkins, J. J.	Navy
2,518,879	Hydrogen Thyratron	Germeshausen, K. J.	Army
2,527,747	Apparatus for Coating Articles by Thermal Evaporation.	Lewis, M. N. Miller, P. H.	Army
2,540,960	Electrolytic Cells	Osborne, S. G.	AEC
2,552,482	Variable Resistance	Ferris, R. G. Jordan, J. D.	Navy
2,569,075	Prevention of Enzymatic Discoloration of Potatoes.	Schade, A. L.	Army
2,585,970	Method and Apparatus for Heating Fluids.	Shaw, T. M.	USDA
2,611,115	Automatic Curve Follower	Johnston, L. H.	Army

SUBGROUP 36–21—Electrical appliances

The following patents relate to establishments engaged in manufacturing household and commercial electrical appliances used for heating, cooking, and other purposes.

Patent No.	Title of Invention	Inventor	Agency
2,476,251	Process for Pasteurization and Enzyme Inactivity of Fruits by Electronic Heating.	Swenson, T. L.	USDA
2,492,187	Method and Apparatus for Electrical Heating.	Rusca, R. A.	USDA
2,552,488	Gear Drive for Dial Mechanisms	Klein, N. E.	Navy
2,621,718	Pulse Jet Heater with Automatic Starting and Control System Therefor.	Krautter, W. F. Staiger, K. Kamm, W. I.	AF

SUBGROUP 36–31—Insulated wire and cable

The following patents relate to establishments engaged in manufacturing insulated or armored wire and cable.

Patent No.	Title of Invention	Inventor	Agency
2,404,471	Floor Construction	Carson, R. H.	Army
2,414,106	Cable Connector	Kelly, W. I.	Army
2,421,178	Clamp	Baker, M. H. Blackburn, J. F.	Army
2,423,842	Protective Covering for Bonded Wire Electric Strain Gages.	McHenry, D.	Int
2,435,788	Control of Reflection in Transmission Lines.	Lawson, J. L.	Navy
2,519,407	Conduit Tester	Shive, S. L.	Army
2,530,105	Method of Making a Diver's Combined Hose and Electrical Communication Line Cable.	Wallace, R. L.	Army
2,553,316	Wire Stripper for Stripping Outer Conductor from Coaxial Wire.	Helminak, J. E.	Navy
2,573,870	Manometric Gas Detector	Pfund, A. H.	Navy
2,604,594	Arrangement for Varying Wave Lengths in Coaxial Lines.	White, M. G.	Navy
2,605,411	Directional Slot Antenna	Riblet, H. J.	Navy
2,605,412	Collinear Sleeve Type Antenna Array.	Riblet, H. J.	Navy
2,607,849	Control of Polariztion in Wave Guides and Wave Guide Systems.	Purcell, E. M. Montgomery, C. G. Montgomery, D. D.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,622,130	Automatic Cable Tester or Fault Analyzer Means.	Kabell, L. J. Richards, R. A. Dyer, A. L.	AEC

SUBGROUP 36–41—Electrical equipment for motor vehicles, aircraft, and railway locomotives and cars

The following patents relate to establishments engaged in manufacturing electrical equipment for motor vehicles, aircraft, and railway locomotives and cars. Included are starting motors, generators, control equipment, and ignition apparatus.

Patent No.	Title of Invention	Inventor	Agency
2,307,583	Remote Speed Control	Hammond, J. H.	Navy
2,444,460	Remote-Control System	Moncrief, J. L.	Army
2,453,114	Filter Condenser and Brush Holder	Brandt, K. H.	Army
2,454,288	Heat-Pressure Operated Warning Switch.	Michaelson, M. L.	Army
2,496,572	Mechanical Transmission	Williams, C. P.	Army
2,523,327	Remote-Control Mechanism	Rabinow, J.	Navy

SUBGROUP 36–51—Electric lamps

The following patents relate to establishments engaged in manufacturing electric bulbs, tubes, and related light sources. Electrotherapeutic lamp units for ultraviolet and infrared radiation are classified in Subgroup 36–93.

Patent No.	Title of Invention	Inventor	Agency
2,147,679	Illuminating System	Stanton, C. I. Seaquist, E. O.	Com
2,404,343	Phototube and Method of Manufacture.	Henderson, J. E. Janes, R. B.	Navy
2,436,907	Indirectly Heated Cathode	Trimble, R. F.	Army
2,507,552	Blackout Automobile Headlight Masks.	Teele, R. P.	Com
2,518,505	Headlamp for Motor Vehicles	Teele, R. P.	Com
2,586,869	Waterproof Pilot Lamp	Soulthorpe, R.	Army

SUBGROUP 36–61—Radios, radio and television equipment (except radio tubes), radar and related detection apparatus, and phonographs

The following patents relate to establishments engaged in manufacturing radio and television receiving and transmitting equipment, electrical and magnetic field detection apparatus, light and heat emission detecting apparatus, object detection apparatus (radar), and other apparatus and products associated with radio equipment, including miscellaneous radio parts; phonographs and accessories, and public-address and music-distribution apparatus. Radio receiving and transmitting tubes are classified in Subgroup 36–62.

Patent No.	Title of Invention	Inventor	Agency
2,066,674	Multistage Ultra High Radio Frequency Amplifier.	Dunmore, F. W. Hughes, L. L.	Com
2,104,028	Aircraft Blind Landing Beam System.	Dunmore, F. W.	Com
2,108,833	Telegraphic Keying Circuit	Wallace, J. D.	Navy
2,110,761	Automatic Volume Control for Radio Receiving Apparatus.	Diamond, H. Dunmore, F. W.	Com
2,119,530	Course Indicator for Blind Flying and Landing.	Dunmore, F. W.	Com
2,120,241	Radio Guidance of Aircraft	Diamond, H. Dunmore, F. W.	Com
2,120,245	Course Indicator for the Double and Triple Modulation Directive Radio Beacons.	Dunmore, F. W.	Com
2,121,024	Radio Transmitting and Receiving System.	Diamond, H.	Com
2,121,778	Sound Translating Apparatus	Ballantine, S.	Army
2,121,779	Sound Translating Apparatus	Ballantine, S.	Army
2,121,780	Sound Translating System	Ballantine, S.	Army
2,121,781	Sound Translating Device	Ballantine, S.	Army
2,121,787	Method and Apparatus for Determining the Migration of Fish.	Dahlgren, E. H.	Com
2,122,191	Sound Translation Apparatus	Ballantine, S.	Army
2,127,954	Radio Beam and Receiving Device for Blind Landing of Aircraft.	Dunmore, F. W.	Com

Patent No.	Title of Invention	Inventor	Agency
2,128,923	Radio System for Azimuth Indication.	Dunmore, F. W.	Com
2,132,208	Ultrahigh Frequency Radio Amplifier.	Dunmore, F. W.	Com
2,133,285	Radio System for Automatic Control of Aircraft, as During Landing.	Dunmore, F. W.	Com
2,137,241	Automatic Steering System	Dunmore, F. W.	Com
2,145,876	Radio Direction Finder	Hinman, W. S.	Com
2,146,724	Radio System for Collision Prevention.	Dunmore, F. W.	Com
2,157,122	Warning System for Indicating the Proximity of Aircraft.	Dunmore, F. W.	Com
2,165,123	Contact Microphone	Ballantine, S.	Army
2,165,124	Throat Microphone	Ballantine, S.	Army
2,165,316	Electrical Resistance Element, Alloy, and Production Thereof.	Thomas, J. L.	Com
2,172,365	Directive Antenna System	Diamond, H.	Com
2,176,886	Measuring Rainfall	Campbell, R. L.	TVA
2,179,499	Method of Blind Landing of Aircraft	Diamond, H.	Com
2,207,769	Telemetric System	White, J. E.	TVA
2,210,903	Temperature Measuring	Dunmore, F. W.	Com
2,215,484	Sonic Flocculator and Method of Flocculating Smoke and the Like.	St. Clair, H. W.	Int
2,261,974	Electrolytic Resistors	Craig, D. N.	Com
2,266,038	Radio Direction Finder	Hinman, W. S.	Com
2,277,692	Measuring Cloud Height and Thickness.	Dunmore, F. W.	Com
2,283,919	Art of Radiometeorography	Diamond, H. Hinman, W. S.	Com
2,287,786	Automatic Weather Station	Diamond, H. Hinman, W. S.	Com
2,295,570	Humidity Measuring	Dunmore, F. W.	Com
2,318,646	Telemetric System	White, J. E.	TVA
2,323,317	Altitude Measuring	Dunmore, F. W. Lapham, E. G.	Com
2,348,730	Visual Type Radio Beacon	Dunmore, F. W. Kear, F. G.	Com
2,371,244	Oscillosphygmograph	Lax, H.	HEW
2,389,692	Remote Indicating System	Sherwin, C. W.	Army
2,391,678	Magnetostriction Transducer	Bundy, F. P.	Navy
2,391,917	Band Switch Mechanism for Transmission Lines.	Newkirk, T. A.	Army
2,392,873	Art of Locating Objects by Heat Radiation.	Zahl, H. A.	Army
2,393,885	Electroacoustic Binaural Listening System.	Claassen, F. S.	Army
2,394,028	Jig for Winding Spherical Coils	Volsk, N. T.	Army
2,395,252	Impact Operated Release Mechanism.	Carpenter, T. H.	Navy
2,395,309	Direct Reading Sound Pressure Meter.	Wiener, F. M. Wallace, R. L.	Navy
2,395,902	Electronic Chronoscope for Measuring Rates of Detonation.	Nisewanger, C. R. Brown, F. W.	Int
2,396,463	Control of Torpedo Antenna	Hammond, J. H.	Navy
2,397,128	Radio Adaptor Unit	Cole, E. McCoy, R. E.	Army
2,402,143	Parachute Pack	Arenstein, G. H.	Army
2,402,682	Mounting Device	Shriro, M. A. Hindin, A.	Army
2,402,688	Meteorological Telemetering System	Skurnick, S.	Army
2,404,343	Phototube and Method of Manufacture.	Henderson, J. E. Janes, R. B.	Navy
2,405,614	Moistureproofing Device	Shriro, M. A.	Army
2,405,814	Echo Box Resonance Tester	Brannin, J. W.	Navy
2,405,858	Acoustic Coupler for Condenser Microphones.	Silent, H. C.	Navy
2,408,373	Antenna	Chu, L. J.	Army
2,408,395	Object Locating System	Hays, J. B.	Navy
2,408,474	Noise Shield for Transmitter Mouthpieces.	Newman, E. B. Miller, J.	Army

Patent No.	Title of Invention	Inventor	Agency
2,408,490	Earphone Socket	Stevens, S. S	Army
2,408,494	Earphone Socket	Veneklasen, P. S	Army
2,411,338	Wave Guide	Roberts, S	Army
2,411,828	Antenna Release Mechanism	Hammond, J. H	Navy
2,413,066	Torpedo Control by Multiple Channel Selector.	Purington, E. S	Navy
2,413,067	Torpedo Control by Timing Selector	Purington, E. S	Navy
2,414,106	Cable Connector	Kelly, W. I	Army
2,414,129	Variable Sensitivity Sound-Powered Receiver.	Volsk, N. T	Army
2,416,347	Method of Making Helical Thread Resistors.	Rector, J. L	Army
2,416,557	Electro-Acoustic Transducer Having Damping Slots.	Wiener, F. M	Army
2,417,422	Manipulatable Serving Support	Kurtz, A. W	Army
2,418,143	Signal Comparison System	Stodola, E. K	Army
2,418,463	Crystal Analysis Apparatus	Coleman, J. E	Army
2,418,480	Asymmetrically Conducting Network.	Prichard, A. C Myers, I. O.	Army
2,418,964	Electro-Mechanical Apparatus	Arenberg, D. L	Army
2,419,606	Linear Saw-Tooth Generator	Stodola, E. K	Army
2,422,469	Electron Emitting Cathode	Coomes, E. A	Army
2,423,306	Transmission Line	Forbes, G. D Shapiro, H.	Army
2,423,355	Earphone Socket Structure	Veneklasen, P. S	Army
2,423,447	High-Frequency Ammeter and Power Meter.	Grimm, H. H	Army
2,423,463	Resistance Network	Moore, J. R	Army
2,424,976	System for Detecting Sources of Radiant Energy.	Goley, M. J Zahl, H. A.	Army
2,427,008	Antenna Mast Base	Lee, N	Army
2,427,691	Noise Reducing in Pulse Reception	Prichard, A. C	Army
2,428,391	Insulator Protecting Device	Smith, H. J	Army
2,428,746	Boom Mounting for Microphones	Veneklasen, P. S	Army
2,429,843	Device for Measuring Electromagnetic Field Intensity.	Redheffer, R. M	Army
2,429,844	Pulse Delay Circuits	Rothman, M. I Neiman, W. H.	Army
2,431,045	Method of Winding Coils	Johnson, J. L	Army
2,431,846	Wood Core Magnetostriction Hydrophone.	Thuras, A. L	Navy
2,431,854	Apparatus for Suppressing Reverberation.	Wood, L. G	Navy
2,432,230	Electrical Apparatus	Dorne, A	Army
2,433,924	Antenna	Riblet, H. J	Army
2,433,991	Lag-Lead for Bearing Deviation Indicator.	Hebb, M. H	Navy
2,434,263	Determining Upper Air Wind Conditions by Radio Direction Finding.	Diamond, H Dunmore, F. W. Hinman, W. S.	Com
2,434,469	Pressure-Proof Reproducer	Myers, W. A	Navy
2,434,933	Transmission Line Flashover Detector.	Kinyon, A. L Scarborough, W. E.	Int
2,434,934	Localizer Radio Antenna Array	Kitzerow, D. J	Army
2,436,512	Pulse Frequency Selective Recorder	Hollywood, J. M	Army
2,436,845	Coaxial Spark Gap	Wiler, E. M	Army
2,436,890	Modulated Saw-Tooth Sweep Generator.	Higinbotham, W. A	Army
2,436,891	Electronic System for Differentiating Voltage Wave Forms.	Higinbotham, W. A.	Army
2,436,907	Indirectly Heated Cathode	Trimble, R. F	Army
2,437,482	High-Frequency Electrical Transmission Line.	Salisbury, W. W	Navy
2,437,876	Signal Receiver and Warning Device	Cohn, S. B	Army
2,437,889	High-Frequency Tuning Device	Nordsieck, A. T	Army
2,437,892	Voltage Control Circuit	Rambo, W. R	Army
2,438,396	Electronic Device Circuit	Jacobs, G. B Steigerwalt, O. I.	Army
2,438,417	Amplitude Controlled Current Regulator.	Russell, F. A	Army

Patent No.	Title of Invention	Inventor	Agency
2,438,580	Compensator for Doppler Effect	Schuck, O. H	Navy
2,439,285	Wave Guide Mode Transformer	Clapp, R. E	Army
2,439,313	Electrical Circuit	Meagher, R. E	Army
2,439,321	Electrical Circuit	Starr, M. A	Army
2,439,324	Electrical Circuit	Walker, R. M	Army
2,439,857	Single Knob Oximeter having Selective Control Means for Multiple Channels.	Millikan, G. A	AF
2,440,203	Cathode Structure	Kusch, P	Army
2,440,210	Antenna	Riblet, H. J	Army
2,440,308	Oscillator Structure	Storck, E. A	Army
2,440,689	Extensible Antenna Support	Irby, J. W	Army
2,441,133	Automatic Weather Data Transmitting Station Unit.	Brady, J. M	Army
2,441,217	Process of Coating Cathode-Ray Tube Screens.	Windsor, R. B	Army
2,441,387	Electronic Squaring Circuit	Berger, F. B Higinbotham, W. A.	Army
2,442,619	Radio-Frequency Power Meter	Schmitt, O. H	Navy
2,443,790	Peaking Circuit	Forbes, G. D	Army
2,443,794	Electrical Apparatus	MacNichol, E. F	Army
2,444,036	Signal Generator for Testing the Resolving Power of Cathode-Ray Tubes.	Crost, M. E	Army
2,444,193	Plan Position Indication System	Gillette, F. N Haworth, L. J.	Army
2,444,206	Transmission Line for Radio Frequencies.	Pease, M. C	Army
2,444,460	Remote-Control System	Moncrief, J. L	Army
2,444,890	Self-Synchronous Frequency Divider	Hite, G Whitham, G. E.	Navy
2,445,336	Antenna Mounting	Rauch, A	Army
2,445,712	Auditory Tone Signal Indications for Flying.	Forbes, T. W	Navy
2,446,186	Fan Antenna with Tail	Meier, A. S	Army
2,446,802	Pulse Shaping Circuit	Bell, P. R	Army
2,446,835	Compression-Wave Delay Device	Keary, T. J	Army
2,446,837	Magnetic Sweep Generator	Kraus, J. D Mizen, C. A.	Army
2,446,863	Adjustable Transmission Line	Yevick, G. J	Army
2,446,982	Apparatus for Broad-Band Radio Transmission.	Pound, R. V	Navy
2,447,336	Fluxion Meter	Hisserich, C. A	Navy
2,447,392	System for Aligning Receiver and Transmitter Circuits.	Byrne, J. F	Army
2,448,296	Tunable Inductance	Cary, R. J	Army
2,448,299	Beam Intensity Control	Dorne, A	Army
2,448,543	Circuit for Periodically Generating Oscillations.	Moore, J. R	Army
2,449,035	Smoothing Servo	Coffin, F. P Bothwell, F. E. Crout, P. D.	Navy
2,449,443	Line Pulse Modulator for Multichannel Transmitter.	Bettler, P. C Doolittle, H. D.	Army
2,449,517	Conical Scanning Error Reduction Device.	Stout, P. R Tull, W. J.	Army
2,449,524	Oscilloscope Device	Witherby, T. H Farnsworth, H. E.	Army
2,449,550	Battery Adapter	Eichberg, R. L Montague, H. R.	Army
2,449,562	Antenna	Meier, A. S	Army
2,450,101	Material for Use in the Manufacture of Ear Defenders and the Like.	Veneklasen, P. S Watson, N. A.	Navy
2,450,618	Indicating Device	Smullin, L. D Wiesner, J. B.	Army
2,450,619	Tunable Magnetron	Sonkin, S	Army
2,450,763	Ultra High Frequency Generator Vacuum Tube and Cathode Structure Therefor.	McNall, J. W	Navy
2,450,872	Condenser Tester	Aiken, E. W	Army
2,451,502	Ultrahigh Frequency Oscillator	Lisman, H Stodola, E. K.	Army

Patent No.	Title of Invention	Inventor	Agency
2,451,809	Variable Inductance Device	Clark, J. L	Army
2,451,825	Oscillator Tube with Tunable Coaxial Resonator.	Guarrera, J. J	Army
2,451,827	Push-Pull Amplifier	Haworth, L. J	Army
2,451,876	Radio-Frequency Joint	Salisbury, W. W	Navy
2,451,893	Stagger Tuned Amplifier	Wallman, H	Army
2,452,044	High Emission Cathode	Fox, B	Army
2,452,572	Delay Line	Jago, J. L	Army
2,452,614	Electrical Test Circuit	Teetsell, R. J	Army
2,452,737	Resistor	Eisenstein, A. S Germeshausen, K. J.	Army
2,452,767	Broad-Band Antenna	Kraus, J. D	Army
2,452,786	Cathode Structure	O'Neill, H. T	Army
2,452,822	Reflector	Wolf, J. M	Army
2,453,113	High-Frequency Variable Inductance	Bowers, J. L	Army
2,453,114	Filter Condenser and Brush Holder	Brandt, K. H	Army
2,453,160	Field Intensity Meter	Ringer, A	Army
2,453,787	Sawtooth Voltage Generator	Downs, G. W	Navy
2,454,132	Oscillating System	Brown, P. F	Army
2,454,204	Cathode-Ray Tube	Raymond, R. C	Army
2,454,841	Apparatus for Detecting the Presence and Position of an Invisible Body by Infrared Radiation.	Sackville, W	Army
2,455,224	Antenna	Buchwalter, L Harvey, G. G.	Army
2,455,283	Indicating System	Valley, G. E	Army
2,455,286	Antenna Cap	Werner, F. D	Navy
2,455,332	Wide-Range Audio-Frequency Amplifier.	Hare, D. G	Navy
2,455,718	Direct-Current Amplifier	Weller, B. L	AEC
2,456,323	Radiating Horn	Risser, J. R Wlodkowski, R. J.	Army
2,456,550	Keyed Oscillator	Wilson, F. B	Navy
2,456,598	Method and Apparatus for Monitoring Underwater Echo Range and Bearing System.	Schuck, O. H	Navy
2,458,033	Microphonics Tester	Sterner, J. E	Navy
2,458,632	Ionization Chamber	Parsons, J. H	AEC
2,458,830	Modulation Indicator	Byrne, J. F	Army
2,459,197	Method of Measuring Characteristic Impedance of Fittings for Coaxial Connectors.	Stewart, C	Army
2,459,679	Sound Ranging Training Apparatus	Beyer, C. M Bolze, E. M.	Navy
2,459,784	Millivolt Control Unit	Alderson, J. W	Army
2,460,304	Connector	Vanderpool, H. D McGee, K.	Army
2,460,790	Generator	Jarvis, C. W	Navy
2,461,061	Equalized Delay Line	Kallmann, H. E	Navy
2,461,091	Transformer Network	Stephenson, R. G Bush, W. M.	Navy
2,461,144	Electrical Storage Device	Cook, J. C	Army
2,461,158	Radio Protective Device	Hollingsworth, L. M. Smullin, L. D.	Army
2,461,181	Reflecting Device	Rosenberg, P	Army
2,461,321	Production of Electric Pulses	Guillemin, E. A	Navy
2,462,880	Primary Cell of the Lead-Zinc Type	Mandel, H. J	Army
2,462,881	Antenna	Marchetti, J. W	Army
2,463,347	Adjustable Waveguide Joint	Aron, W Ehlers, F. E.	Army
2,463,417	Tunable Circuit	Overacker, H. E	Army
2,463,423	Tunable Cavity Resonator	Record, F. A	Army
2,463,428	Coaxial Line Termination	Rieke, F. F	Army
2,463,436	Bridge for Measurement of Radio-Frequency Power.	Sorvaag, C. M	Army
2,463,480	Compensated Radio-Frequency Power Measuring Bridge.	Fenn, W. H Griesheimer, R. N. Keuffel, J. W.	Army

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2,463,527	Measuring Potential Gradients in Space.	Dunmore, F. W.	Com
2,464,252	Pulsed Oscillator	Moore, J. R.	Army
2,464,258	Radio Apparatus	Pritchard, A. C.	Army
2,465,673	Antenna	Breen, S. Chu, L. J.	Army
2,465,985	Noise Shield for Handsets	Veneklasen, P. S.	Army
2,467,383	Microphone Holder	Huff, R. L.	Army
2,468,125	Standing Wave Indicator	Silver, W. T.	Army
2,468,655	Diode Detector for Hyperfrequencies.	Cole, P. A. Kuper, J. B.	Army
2,468,678	Regulator	MacKenzie, K. R.	AEC
2,468,687	Pulse Storage Device	Schmitt, O. H.	Army
2,468,721	Earphone Socket and Noise Shield	Volkmann, J.	Army
2,470,016	Antenna	Clapp, R. E.	Army
2,470,609	Piezoelectric Crystal	Elmore, W. C. Marshall, J. F.	Army
2,470,618	Electrical Apparatus	Holden, L. T.	Army
2,470,895	Impulse Type Power Supply	Marlowe, E. W. Wilcox, H. A.	AEC
2,471,705	Variable Reactor	Schmitt, O. H.	Navy
2,471,732	Resistance Element for a Coaxial Transmission Line.	Feenberg, E.	AF
2,472,196	Transmit-Receive System	Cork, B. B.	Army
2,472,200	Variable Frequency Magnetron Circuit.	Everhart, E.	Army
2,472,201	Antenna	Eyges, L. J.	Army
2,472,209	Cathode Ray Circuits	Hall, W. M.	Army
2,472,212	Method of Locating Beacons	Hudspeth, E. L.	Army
2,472,213	Antenna System	Hulstede, G. E.	Army
2,472,369	Rheostat	Davis, L. K.	Navy
2,472,378	Detection of High-Frequency Electric Oscillations.	Lawson, J. L.	Navy
2,472,388	Magnetostrictive Oscillator	Thuras, A. L.	Navy
2,472,801	Temperature-Stable Molded Resistor.	Barfield, M. L. Gurtowski, J. J.	Army
2,473,175	Radio Direction-Finding System	Ridenour, L. N.	Navy
2,473,421	Search Antenna Array	Fubini, E. Hamermesh, M.	Army
2,473,426	Electrical Apparatus	Halpern, J.	Army
2,473,432	Electronic Square Wave Signal Generator.	Johnston, L. H.	Army
2,473,443	Ultra High Frequency Rotatable Joint.	Ragan, G. L.	Army
2,473,446	Antenna	Riblet, H. J.	Army
2,473,454	Antenna	Sichak, W.	Army
2,473,457	Potential Comparator	Tyson, O. A.	Army
2,473,922	Breathing Indicator	Tobias, C. A.	AF
2,473,971	Underwater Transducer	Ross, D. E.	Navy
2,473,974	Underwater Sound Detecting and Indicating System.	Schuck, O. H.	Navy
2,474,386	Headband and Earphone Mounting	Volkmann, J.	Army
2,474,773	Radiation Detector	Baker, W. R.	AEC
2,474,854	Antenna	Marchetti, J. W.	Army
2,477,028	Dual Channel Gain Control	Wilkie, H.	Army
2,477,510	Slotted Wave Guide Antenna	Chu, L. J.	Navy
2,478,208	Wave Measuring System	Rothman, M. I. Shapiro, G.	Army
2,478,221	Servo-Mechanism Synchronizing System.	Alford, A. Barkofsky, E. C.	Army
2,478,241	Flat Beam Antenna	Chu, L. J.	Army
2,478,242	Antenna	Clapp, R. E.	Army
2,478,245	Transmit-Receive Device	Brewer, G. R. Cork, B. B.	Army
2,478,300	Radio Direction Indicator	Mizen, C. A.	Army
2,478,303	Power Supply Circuit Means	Mullin, C. J.	Army
2,478,307	Mechanical Device	Overacker, H. E.	Army

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2,478,311	Circuit for Determining Carrier Frequencies of Frequency Modulated Signals.	Pease, M. C	Army
2,478,317	Directional Coupler	Purcell, E. M	Army
2,478,332	Transmit Receive Switching System for Pulse Communication System.	Smullin, L. D Wiesner, J. B.	Army
2,479,195	Communication System	Alvarez, L. W	Army
2,479,208	Panoramic Receiver with Quarter-Wave Line Discriminator Sweep Circuit.	Byrne, J. F Kamphoefner, F. J.	Army
2,479,209	Antenna	Chu, L. J	Army
2,479,220	Waveguide	Early, H. C	Army
2,479,222	Electrical Apparatus	Edlen, G. G	Army
2,479,227	Dual Frequency Antenna	Gilbert, E. N	Army
2,479,264	Combined Coaxial and Crystal Holder.	Rosenberg, P	Army
2,479,272	Antenna	Silliman, R. M	Army
2,479,567	Radio Position Determining System	Hallman, L. B	Army
2,479,586	Antenna Control System	Moore, J. R Pacini, H. P.	Army
2,479,808	Electromagnetic Apparatus for Measuring Projectile Velocity During Penetration.	Beth, R. A	Army
2,479,970	Compensated Amplifier	Schmitt, O. H	Navy
2,480,140	Antenna Switching Device	Kester, R. E	Army
2,480,181	Directive High-Frequency Antenna	Breen, S. L Chu, L. J. Pao, C. S.	Army
2,480,182	Antenna	Clapp, R. E	Army
2,480,186	Antenna	Gilbert, E. N	Army
2,480,187	Electrical Apparatus	Gamertsfelder, G. R.	Army
2,480,189	Antenna System	Irving, J. H	Army
2,480,194	Electrical Apparatus	Montgomery, C. G	Army
2,480,199	Reflector	Rosenberg, P Garman, R. L.	Army
2,480,201	Apparatus for Compressing the Amplitude Range of Signals.	Selove, W	Army
2,480,205	Stagger Damped Tuned Amplifier	Wallman, H	Army
2,480,208	Radio Distance and Direction Indicator.	Alvarez, L. W	Army
2,480,561	Hydrofoil Depth Control	Ewing, W. M Worzel, J. L.	Navy
2,480,575	Inverse Modulation Detector	Hare, D. G	Navy
2,480,872	Beam Tube Receiver Input	Moore, J. R	Army
2,482,020	Self-Synchronous Motor System	Meagher, R. E McFarlane, M. D.	Navy
2,482,128	Receiver Protection Circuit	Schmid, R. F	Army
2,482,143	Control Circuit for Antenna Scan Systems.	Watt, B. E	Navy
2,482,544	Pulse Code Operated Electronic Range Indicator.	Jacobsen, A. B	Army
2,482,828	Mounting for Piezoelectric Elements	Bottom, V. E	Army
2,483,125	Phase Shifting Potentiometer	Cummerow, R. L Davis, L. K.	Navy
2,483,226	Electronic Noise Generator	Newman, E. B	Navy
2,483,981	Dynamic Condenser	Swank, R. K Palevsky, H.	AEC
2,485,847	Combination Magnetometer and Gradiometer.	Schmitt, O. H	Navy
2,485,886	Triple Gate	Johnstone, C. W Mautner, L. P.	Navy
2,485,888	Electronic Tachometer and Stroboscope.	Jordan, J. D	Navy
2,485,902	Condenser	Melton, B. S	Navy
2,485,919	Electrical Circuit	Rambo, W. R	Army
2,485,920	Antenna	Riblet, H. J	Army
2,485,924	Tester for Electronic Discharge Devices.	Sanders, E. R	Navy
2,485,930	Connector	Silliman, R. M	Army
2,485,938	Voltage Generator Hyperbolic Wave Form.	Talbott, F. L Robinson, R. O.	Navy

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2,485,953	Aircraft Control System	Barth, T. H	Navy
2,486,377	Alternator System	Abbott, J. G	Army
2,486,589	Apple-Core Reflector Antenna	Chu, L. J	Navy
2,486,620	Antenna System for Short Waves	Van Atta, L. C	Navy
2,487,135	Amplifier for Underwater Listening Apparatus.	Herrnfeld, F. P	Navy
2,487,510	Current Integrating Network	Baker, W. R	AEC
2,489,393	Crystal and Method of Fabricating Same.	Argabrite, G. A Burke, T. F.	Navy
2,489,433	Radio-Frequency Coupling Device	Rambo, W. R	Army
2,490,487	Electronic Noise Generator	Stevens, S. S	AF
2,490,768	Radio Remote-Control System	Althouse, J. M McAdams, M. A.	Army
2,490,782	Antenna Testing Shield	Collup, D. E	Army
2,491,220	Neutron Detector	Segre, E. G Wiegand, C. E.	AEC
2,491,320	Neutron Detectors and Method of Making Same.	Koontz, P. G	AEC
2,493,787	Antenna	Torretti, T. T	Army
2,493,935	High Energy Neutron Counter	Segre, E. G Wiegand, C. E.	AEC
2,494,641	Radiation Counter	Anderson, H. L Koontz, P. G.	AEC
2,495,023	Discriminator Circuit	Sebring, P. B Brooks, H.	Navy
2,495,274	Electrical Discharge Device	Mayer, W. G	Army
2,495,650	Coincidence Proportional Counter	Blair, J. M Hush, J. M.	AEC
2,496,123	Ionization Chamber	East, J. K English, S. G.	AEC
2,496,521	Single Side Band Modulation System	Dickie, R. H	Army
2,496,535	Unitary Control for Velocity-Modulation Tubes.	Hoglund, R. H Hulstede, G. E. Yakutis, A. J.	Army
2,496,541	Bridge for Measuring Electromagnetic Wave Energy.	Johnson, M. H	Army
2,496,543	Controlled Width Pulse Generator	Kanner, M. H	Army
2,496,551	Logarithmic Cascade Amplifier	Lawson, J. L Martin, F. W.	Army
2,496,560	Radio Spectrum Monitoring Apparatus.	Raymond, R. C	Army
2,496,819	Pulse Generator	Simpson, A. R	AEC
2,496,886	Radiation Alarm and Measurement Device.	Molloy, E. W Hinch, W. H.	AEC
2,497,854	Ultra High Frequency Ring Oscillator.	Baller, M. D	Army
2,498,045	Deceleration Apparatus	Looney, C. T Howell, L. G Johnston, B. G.	Navy
2,498,049	Liquid Rheostat	Robertson, J. B	Navy
2,498,053	Capacitor Housing	Steen, W. J	Navy
2,498,056	Nutator	Werner, F. D	Navy
2,498,529	High-Frequency Oscillator	Clark, J. L	Army
2,498,548	Comparator Circuit	Howard, R. A	Army
2,498,561	Adjustable Band-Pass Selector	Lipkin, H. J	Army
2,498,577	Combined Oscillator and Reactance Tube Structure.	Rambo, W. R	Army
2,498,589	Connector	Steinke, R. R	Army
2.498,660	Collapsible Multi-Corner Reflector for Ultra High-Frequency Radiant Energy.	Dunmore, F. W Lyons, H.	Com
2,498,841	Ion Source	King, L. D	AEC
2,498,997	Photoelectric Inclinometer and Accelerometer.	McLean, W. B Swift, I. H.	AF
2,499,289	Ion Generator	Backus, J. G	AEC
2,499,320	Ion Generator	Loevinger, R	AEC
2,499,777	Electrical Break-Down Device	Pound, R. V	Navy
2,499,830	Air Proportional Counter	Molloy, E. W	AEC
2,500,169	Battery Filler Device Having a Puncturing Element for Piercing an Evacuated Battery Enclosing Can.	Ellis, G. B	Army

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2,500,756	Rectangular Pulse Amplifier	Kerns, Q. A	AEC
2,501,020	Antenna Structure	Barnes, R. B	Army
2,501,052	High-Frequency Transmission System	Herlin, M. A	Army
2,501,070	Antenna	Martinelli, E. A	Army
2,501,072	Antenna Housing	McMillan, E. B Riblet, H. J.	Army
2,501,093	High-Frequency Mixer	Raymond, R. C	Army
2,501,094	Antenna	Raymond, R. C	Army
2,501,095	Electron Tube of Velocity Modulation Type.	Record, F. A	Army
2,501,105	Microwave Antenna	Steinberger, J	Army
2,501,107	Headband	Volkmann, J	Army
2,501,110	Indicating Circuit	Walker, R. M	Army
2,501,728	Tuning Mechanism for Resonant Cavities and the Like.	Martin, E. G	Navy
2,502,837	Position Indicating System	Entz, F. S Pullis, G. A. Stibitz, G. R.	Army
2,502,975	Sector Scan Control for Antenna Systems.	McFarlane, M. D	Navy
2,503,247	Electronic Detector	Daum, C. R Cleaver, L. T.	Int
2,505,515	Compressional Wave Delay Means	Arenberg, D. L	Army
2,505,529	Tunable Magnetron	Crawford, F. H Hare, M. D.	Army
2,505,549	Integrating Circuit	Johns, W. B	Army
2,505,557	Waveguide Attenuator for Amplitude Modulation of Radio Waves.	Lyman, E. M	Army
2,505,569	Antenna	Nowak, W. B	Army
2,505,572	Tuning Unit	Overacker, H. E	Army
2,505,585	Electroacoustic Binaural Listening System.	Silent, H. C	Army
2,505,594	Atmospheric Static Simulator	Wallace, R. L Stevens, S. S.	Army
2,506,433	Magnetic Flux Measuring Apparatus.	Plesset, E. H	AEC
2,506,435	Radiation Measurement	Rossi, B. B Allen, J. S.	AEC
2,506,617	Method of and Apparatus for Locating and Tracking a Distant Body.	Sackville, W	Army
2,506,944	Neutron Meter	Stauffer, L. H Snyder, T. M.	AEC
2,507,432	Squelch or Muting of Amplifier	Bass, H. A	AF
2,508,384	Method and Means for Automatic Tracking and/or Ranging.	Gross, M. H	Army
2,508,562	Position Locating Method	Bonner, T. W	Army
2,508,565	Electrical Navigation System	Chance, B	Army
2,508,569	Pulse Shortening Circuit	Forbes, G. D	Army
2,508,571	Radio Echo Detection Apparatus	Hudspeth, E. L	Army
2,508,573	Ultra High Frequency Oscillator Circuit.	Hulstede, G. E	Army
2,508,576	Tunable Magnetron	Kusch, P	Army
2,508,581	Noise Shield for Microphones	Morrow, C. T	Army
2,508,586	Supercharged Cathode Follower Circuit.	Veneklasen, P. S	Army
2,509,669	Mechanical Coupling	Borst, L. B	AEC
2,509,700	Radioactivity Measuring Device	Simpson, J. A	AEC
2,509,703	Protecting Circuit	Stanton, R. S	Navy
2,509,903	Antenna and Oscillator Coil Unit	Brode, R. B Ferris, R. G.	Navy
2,509,928	Radio Frequency Switch	Klein, N. E	Navy
2,510,059	Platform	Black, E. A	Army
2,510,129	Pulse Generating Circuit	Moore, J. R	Army
2,512,130	Delay Means	Arenberg, D. L	Army
2,512,137	Antenna	Buchwalter, L Harvey, G. G.	Army
2,512,138	Shielding Arrangement	Butt, C	Army
2,512,139	Antenna	Cady, W. M	Army

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2,512,144	Moving Object Detection System	Emslie, A. G	Army
2,512,147	Antenna	Gardner, J. H	Army
2,512,152	Pulse Delay Circuit	Haworth L. J, Lee, R. W. Sherwin, C. W.	Army
2,512,156	Delay Means	Hoffmann, A. D	Army
2,512,191	Broad Band Directional Coupler	Wolf, J. M	Army
2,512,495	Cathode-Gate Amplifying Phase Detector.	Gray, J. W	Navy
2,512,538	Electric Discharge Device	Baker, W. R	AEC
2,512,637	Noise Suppression Circuit	Frazier, R. E	Army
2,512,657	Radio Direction Finders	Lapham, E. G	Com
2,512,699	Radio Pulse Receiver Interference Eliminator.	Todd, W	Army
2,512,779	Control for Plan Position Indicator	Sherwin, C Meagher, R. E.	Navy
2,513,157	Nose Structure for Projectiles	Ferris, R. G Dike, S. H.	Navy
2,513,205	Rotatable Joint for Radio Wave Guide Systems.	Roberts, S	Navy
2,513,342	Radio Remote-Control System	Marshall, C. J	Army
2,513,805	Detecting Device	Kanne, W. R	AEC
2,514,135	Radiation Detector	Neil, H. G	AEC
2,514,289	Recognition Trainer	Nye, R. G Apple, L. T.	Navy
2,514,297	Apparatus for Observing the Conduct of a Projectile in a Gun.	Smith, N. M Crocker, J. A	Navy
2,515,042	Torque Amplifier	Hughes, E. S Agy, V. L. Duffin, R. J.	Navy
2,515,178	Means for Synchronizing Detection and Interrogation System.	Barchok, D	Army
2,516,296	Synchronizer for Multiple Set Radar System.	Brown, C. W	Navy
2,516,343	Short-Range Continuous Wave Radar System.	Roberts, W. V	Navy
2,516,356	Automatic Range Tracking and Memory Circuit.	Tull, W. J Proctor, W.	Navy
2,516,500	Electrical Apparatus	Alford, A	Army
2,516,505	Wide Band Stub Line Device	Clark, H. K	Army
2,516,522	Parasitic Suppressor for Cavity Resonator Devices.	McNees, S. G	Army
2,516,528	Wave Guide Coupler	Purcell, E. M	Army
2,516,529	Capacitive Connection for Coaxial Lines.	Raymond, R. C	Army
2,516,530	Antenna	Robertson, R. M	Army
2,516,533	Electrical Circuit	Slack, F. F	Army
2,516,934	Gas Generator	Weaver, E. R	Com
2,517,079	Control Mechanism	Birdsall, E. H	Navy
2,517,133	Apparatus for Determining Conditions within a Gun Barrel.	Porter, H. H	Navy
2,517,591	Radar Navigational Training Equipment.	Nightenhelser, K. W	Army
2,517,676	Pulse-Forming Preamplifier	Kerns, Q. A	AEC
2,517,863	Voltage Supply Circuit for Vacuum Tubes.	Froman, D. K	AEC
2,518,879	Hydrogen Thyratron	Germeshausen, K. J.	Army
2,518,926	Radio-Frequency Power Measuring Circuit.	O'Neal, R. D	Army
2,518,931	Wave Guide Mixer	Pound, R. V	Army
2,518,933	Antenna for Radiating Circularly Polarized Waves.	Redheffer, R. M	Army
2,518,938	Supersonic Training Device	Rosenberg, P	Army
2,519,007	Radiation Counter	Wilson, V. C	AEC
2,519,407	Conduit Tester	Shive, S. L	Army
2,519,734	Directional Coupler	Bethe, H. A	Army
2,519,750	Rectangular to Circular Wave Guide Junction.	Ehlers, F. E	Army
2,519,763	Electronic Grating Circuit	Hoglund, R. H	Army

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2,519,765	Frequency Measuring System	Jeffries, C. D Overacker, H. E.	Army
2,519,773	Antenna Tracking System	Holmes, E. A Lee, R. W.	Army
2,519,778	Pulse Stretching Circuit	Mizen, C. A	Army
2,519,795	High-Frequency Electrical Breakdown Apparatus.	Smullin, L. D	Army
2,519,802	Pulse Translating Circuit	Wallman, H	Army
2,519,807	Ionization Pressure Gauge	Yeater, M. L	Army
2,520,814	Impulse Emitting Device	Rule, B. H	Navy
2,521,133	Secondary Electron Multiplier	Snell, A. H Miller, L. C.	AEC
2,521,136	Hydrophone	Thuras, A. L	Navy
2,521,656	Ionization Chamber	Segre, E. G Chamberlain, O.	AEC
2,521,732	Rotating Antenna Scanning System	Kline, M	Army
2,521,818	Wave Guide Coupling	Aron, W. A Davis, C. H. Hollingsworth L. M.	Army
2,521,824	Electronic Switch	Brown, A. D	Army
2,521,829	Adjustable Length Coaxial Transmission Line.	Clark, J. L	Army
2,521,843	Coaxial-Type Filter	Foster, J. S	Army
2,521,844	Antenna	Gordy, W. O	Army
2,521,873	Impedance Matching Device for Wave Guides for Antenna Systems.	Robertson, R. M	Army
2,521,878	Sector Scan Circuit	Starr, M. A	Army
2,521,881	Audio-Frequency Recorder	Suomi, V. E	Army
2,521,894	Low Inductance Resistor	Brown, R. J	AEC
2,521,904	Control-Transfer Circuit	Doak, J. B	Navy
2,521,915	Calculator	Hartig, H. E	Navy
2,521,952	Electronic Switch	Stephenson, R. G	Navy
2,522,861	Transmit-Receive Device	Cork, B. B	Navy
2,523,115	Phase Shifting Device	Hersh, J. F Faran, J. J. Reitz, J. R.	Navy
2,523,122	Generator of Ultra-High Frequency Oscillations.	Kuper, J. B Cole, P. A.	Navy
2,523,398	Radio Wave Transmission	Southworth, G. C	Navy
2,523,468	Emission Stabilized Electronic Valve	Hare, D. G	Navy
2,523,487	Emission Indicator	Wilchinsky, Z. W	Navy
2,523,856	Resistance-Capacitance Network	Baker, W. R	AEC
2,524,179	Tuned Ultra High Frequency Thermionic Detector.	Schneider, E. G	Navy
2,524,180	Apparatus for Determining the Direction of Underwater Targets.	Shuck, O. H	Navy
2,524,183	Two-Terminal Impedance Arrangement for Transmission Lines.	Wheeler, H. A	Navy
2,524,211	Radio-Frequency Generator	Schmitt, O. H	Navy
2,524,379	Neutron Velocity Selector	Fermi, E	AEC
2,524,692	Scaling Circuit	Bradley, W. H	AEC
2,524,834	Voltage Control Circuits	Redcay, P. W	Army
2,524,851	Radio Receiver with Pulse Sharpening System.	Stodola, E. K	Army
2,526,671	Voltage Compensator	Kober, W	Army
2,526,846	Impedance-Transforming Arrangement.	Bowman, D. F	Navy
2,526,911	Electrical Breakdown Device of the Cavity Resonator Type.	Stone, A. M	Navy
2,527,474	Radio Beacon and Discriminating Circuit Therefor.	Alvarez, L. W	Navy
2,527,477	Control of the Velocity of Phase Propagation of Electric Waves in Wave Guides.	Clapp, R. E	Navy
2,527,712	Electrical Apparatus	Dicke, R. H	Army
2,527,718	Phase and Amplitude Responsive Control System.	Grass, A. M	Army
2,527,737	Variable Frequency Band Width Amplifier.	Jordan, W. H	Army

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2,527,753	Radio Object Locating System	McConnell, R. A.	Army
2,527,769	Radio Object Location System	Sinsheimer, R. L.	Army
2,527,773	Ultra High Frequency Modulation Circuit.	Stephenson, J. G. Webster, R. R.	Army
2,528,543	Radio Beacon System	Peterson, G. Ercolino, M.	Army
2,528,826	Recording Equipment Having an Adjustable Advance Ball.	Hanson, R. O. Saars, W. F.	Navy
2,528,963	Drive for Nutators	Looney, C. T.	Navy
2,529,502	Tube Socket	Kelly, W. I. Livingood, J. R.	Army
2,529,666	Pulse Height Analyzer	Sands, M. L.	AEC
2,529,823	Plan Position Indicator	Starr, M. A.	Navy
2,530,048	Unbalanced-To-Balanced Impedance Matching Device.	Driscoll, C.	Army
2,530,060	Radio Object Location Indicator	Holdam, J. V. Jones, L. M.	Army
2,530,064	Bent Coaxial Transmission Line	Jones, C. W.	Army
2,530,079	Directive Antenna System	Riblet, H. J.	Army
2,530,093	Transponder Tester Circuit	Speed, D. K.	Army
2,530,096	Electrical Control Apparatus	Sudman, I. H.	Army
2,530,098	Antenna	Van Atta, L. C.	Army
2,530,169	Electronic Regulator	Lawrence, E. O. Waithman, V. B. Schmidt, F. H.	AEC
2,530,176	Apparatus for Measuring Local Variations in Flux Density in a Magnetic Field.	Powell, W. M.	AEC
2,530,178	Fluxmeter	Rathkamp, W. R.	AEC
2,530,418	Radio-Echo Detection Apparatus for Approaching Hostile Craft.	Alvarez, L. W.	Navy
2,530,427	Stabilized Frequency Divider Circuit	Fredrick, A. H.	Navy
2,530,428	Electrical Indicator Plotting Board for Loran Navigation.	Gray, J. W.	Navy
2,531,106	Pocket Radiation Alarm	Brown, R. J. Weiss, H. G.	AEC
2,531,144	Coincidence Proportional Counter	Manley, J. H.	AEC
2,531,414	Electrical Pressure Measuring Device	Engvall, L. R.	Int
2,531,683	Stabilized Line-Tuned Oscillator	Izenour, G. C.	Navy
2,531,693	Line-Tuned Oscillator	Lansman, P. S.	Navy
2,531,713	Line-Tuned Oscillator	Towner, O. W.	Navy
2,531,811	Coulombmeter	Mannel, J. E.	AEC
2,531,830	Voltage Pulse Generator	Simpson, A. R.	AEC
2,532,307	Signal Responsive System	Hess, G. C.	Army
2,532,347	Radar Receiver Automatic Gain Control Circuit.	Stodola, E. K.	Army
2,532,503	Electronic Counting Circuits	Kennedy, J. W. Baker, W. R. Wiegand, C. E.	AEC
2,532,534	Sweep-Voltage Generator Circuit	Bell, P. R.	Army
2,532,539	Testing Device for Radio Object Detection Systems.	Halpern, J. Counter, V. A. Fairbank, W. M.	Army
2,532,546	Moving Target Indicating System	Forbes, G. D.	Army
2,532,549	Aircraft Radar-Map Roll Correction System.	Higinbotham, W. A. Pepinsky, R.	Army
2,532,551	Biconical Electromagnetic Horn Antenna.	Jarvis, G. A.	Army
2,532,566	Photoelectric Gate Control for Pulse-Echo Systems.	Millman, J.	Army
2,532,576	Electrical Apparatus	Sherwin, C. W. Straus, H. A.	Army
2,532,589	Signal-Seeking Transceiver	Wu, W. I.	Army
2,532,874	Detection Apparatus	Anderson, H. L.	AEC
2,532,956	Air Proportional Counter	Simpson, J. A.	AEC
2,533,285	Line Pulse Modulator	Sager, I.	Army
2,533,701	Collimating Shield	Watt, R. D. Watson, W. N.	AEC
2,534,261	Line Pulse Modulator	Gorham, J. E. Silver, W. T.	Army

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2,534,710	Buoy Supported Collapsible Radar Reflector.	Golian, S. E. Whitmer, R. M.	Navy
2,534,712	Apparatus for Measuring Airspeed	Gray, J. W	Navy
2,534,716	Inflatable Radar Reflector Buoy	Hudspeth, E. L. Nash, J. P.	Navy
2,535,032	Radio-Frequency Mass Spectrometer	Bennett, W. H	Com
2,535,053	Portable Radio Compass	Ercolino, M. D	Army
2,535,250	Computing System	Allen, J. S	Army
2,535,251	Rotatable Wave Guide Joint	Alford, A	Army
2,535,255	Electrical System for Locating a Sound Source.	Barnes, T. G. Burger, M. J.	Army
2,535,257	Electrical Circuit	Berger, F. B	Army
2,535,266	Blanking Pulse Generating Circuit	Chance, B	Army
2,535,274	Moving Target Indicator	Dicke, R. H	Army
2,535,285	Electron Tube Circuit	Heaton, R. G	Army
2,535,329	Arrangement for Coupling a Parallel Resonant Line to a Coaxial Line Load.	Steigerwalt, O. I	Army
2,535,331	Wave Guide Antenna	Swarts, L. E	Army
2,535,340	Single Side Band Modulator	Yost, R. R	Army
2,535,355	Voltage Regulation and Supply	Froman, D. K	AEC
2,535,912	Video Gating Circuit	Frank, E. Mozley, R. F.	AF
2,535,942	Electric Direction Finding Evaluator	Allison, J. L. Lewis, J. H.	AF
2,536,617	Amplifier	Weller, B. L	AEC
2,537,696	Stabilized Frequency Divider Circuit	Palmer, J. P	Navy
2,538,040	Interference Reducing	Prichard, A. C	Army
2,538,069	Radio Transmitter-Receiver Jamming System.	Williams, E. M	Army
2,538,781	Radiant Energy Control Device	Herson, J. S	AF
2,539,014	Random Digit Generator	Frantz, W. J	AF
2,539,042	Automatic Gain Control Circuit	Toporeck, E. R	AF
2,539,495	Antenna Output Indicator	Tomberg, S	Army
2,539,581	Adjustable Spring Hold-Down for Radio Tubes.	Holden, L. T	Navy
2,540,035	Electronic Control System for Echo-Ranging Apparatus.	Rodman, I. P	Navy
2,540,720	Transmission Line	Forbes, G. D. Shapiro, H.	Army
2,540,757	Antenna	Riblet, H. J	Army
2,540,764	Magnetron Modulation Circuit	Steigerwalt, O. I	Army
2,541,009	Radar Apparatus	Tashjian, D. R	Navy
2,541,198	Amplifier	Brenholdt, I. R	AEC
2,541,422	Telemetric Tachometer	Kirkland, G. I. Waters, G. E.	Navy
2,543,369	Thermocouple Tube	Kling, A. J	Army
2,543,425	Squeezable Wave Guides for Line Stretching.	Strandberg, M. W	Navy
2,543,431	Video Amplifier Circuit	Bess, L	Army
2,543,433	Electrical Apparatus	White, H. J. Winter, D. F. Branchflower, D. R.	Army
2,543,434	Marker Circuit	Bryan, J. D. Starr, M. A.	Army
2,543,445	Impulse Generating Apparatus	Doolittle, H. D	Army
2,543,448	Moving Object Radio Pulse-Echo System.	Emslie, A. G	Army
2,543,449	Radio Pulse-Echo Moving Object Detection System.	Emslie, A. G	Army
2,543,454	Radio System	Gaerttner, E. R	Army
2,543,462	Pulse Equalizer	Longmire, C. L	Army
2,543,468	Antenna	Riblet, H. J	Army
2,543,902	Radio Frequency Voltage Supply	Dye, R. C	AEC
2,544,842	Overload Protection of High-Frequency Receivers.	Lawson, J. L	Navy
2,545,191	Electronic Deviation Indicator for Echo Ranging Training Apparatus.	Brettell, G. A. Bradley, C. F.	Navy

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2,545,503	Radio Object Detection Alarm	Tucker, W.	Army
2,545,623	Frequency Modulation System	MacKenzie, K. R.	AEC
2,545,924	Fast Impulse Circuits	Johnstone, C. W.	AEC
2,546,106	Apparatus for Regulating High Voltage.	Morrison, K. G.	AEC
2,546,307	Telemetering System	Johnson, W. C. Stevenson, W. D.	Navy
2,547,363	Electrical Marking and Scanning Control Circuit.	Bishop, A. S.	Army
2,547,378	Electrical Systems	Dicke, R. H.	Army
2,547,412	High Frequency Mixers	Salisbury, W. W.	Army
2,547,414	Antenna	Sichak, W.	Army
2,547,809	Pulse Absorbing Circuits	Burger, M. J.	Navy
2,548,383	Radio Receiver	Mabry, F. S. Wilson, W. R.	Navy
2,548,684	Apparatus for Simulating the Operation of a Radio Object Locating System.	Roth, W.	Army
2,548,779	Radio Receiver	Emslie, A. G.	Army
2,548,791	Automatic Focusing Circuit	Yakutis, A. J. Hoglund, R. H. Hulstede, G. E.	Army
2,548,813	Radio Transmitting-Receiving Apparatus.	Perkins, G. D. Stone, C. E.	Army
2,548,819	Tuning Device	Reedy, P. H.	Army
2,548,821	Horn Radiator Adapted to be Fed by a Coaxial Line.	Riblet, H. J. Steinberger, J.	Army
2,549,366	Pulse Transformer with Magnetron Well.	Rostick, W. H.	Navy
2,549,385	Test Set for Radar Apparatus	Rapuano, R. A.	Navy
2,549,721	Antenna System of Variable Directivity and High Resolution.	Straus, H. A. Getting, I. A. Chu, L. J.	Navy
2,550,460	Monitoring Circuit	Farly, G. M. Mack, D. A.	AEC
2,551,529	Pulse Amplitude Discriminator	Davis, F. J. Curtiss, L. F.	AEC
2,551,972	Remote-Control System	Schaelchlin, W. Winchester, A. J. Ponstingl, J. C.	Navy
2,552,488	Gear Drive for Dial Mechanisms	Klein, N. E.	Navy
2,552,489	Method and Apparatus for Adjusting Radio Echo Detection Systems.	Lawson, J. L.	Navy
2,554,469	Direct Current Level Changer for Direct Coupled Amplifier.	Minzner, R. A.	Navy
2,555,101	Aircraft Control Systems	Alvarez, L. W. Johnston, L. H.	Army
2,555,121	Moving Target Indication Radar System.	Emslie, A. G.	Army
2,555,123	Antenna	Gardner, J. H.	Army
2,555,154	Radio Frequency Switching Device	Raymond, R. C.	Army
2,555,163	Electrical Circuit	Schneider, E. G.	Army
2,555,172	Modulator Circuits	White, H. J.	Army
2,555,175	Automatic Frequency Control System.	Whitford, A. E.	Army
2,555,867	Air Launched Radio Station	Bennett, R. P.	Navy
2,556,457	Pulse Width Modulation	Watts, R. J.	AEC
2,557,154	Stabilized Negative Impedance Circuit.	Strandrud, H. T.	Int
2,557,697	Square Wave Modulating Arrangement.	Schmitt, O. H.	Army
2,557,761	Flux Phase Indicator	Powell, W. M.	AEC
2,558,358	Timing Method	Hales, E. B.	Army
2,558,371	Automatic Frequency Control System.	Nibbe, G. H.	Army
2,558,373	Radio Beacon System	O'Day, M. D.	Army
2,558,425	Equation Solver	Droz, M. E.	Navy
2,558,435	Automatic Frequency Control System.	Hollingsworth, L. M.	Army
2,558,463	Tunable Cavity Oscillator	Reed, J. C.	Army
2,558,763	Flexible Members	Lee, N. E.	Army
2,559,259	Method of Making a Source of Beta Rays.	Raper, J. R.	AEC

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2,560,167	Pulse Shaping Circuit	Glenn, W. E.	AEC
2,561,234	Circuit for Distortion Measurement	Saunders, N. B.	AF
2,561,372	Electrical Recorder	Hillman, L.	Army
2,561,475	Circuit for Generating Sloping and Rectangular Gates.	Jacobsen, A. B.	Navy
2,561,727	Tuning of Electrical Resonators	Cooper, H. G. Schultz, H. L.	Navy
2,561,734	Trigger Circuit	Germeshausen, K. J.	Navy
2,561,869	Multiplex Photoelectric Recording System and Method.	Kent, E. L.	Navy
2,561,897	Rotary Contact Modulator Circuit	White, H. J.	Navy
2,562,295	Sawtooth Synchronizing Circuits	Chance, B.	Army
2,562,296	Antenna	Christensen, J. W. Moyer, R. C.	Army
2,562,304	Automatic Frequency Control System.	Durand, E. Hollingsworth, L. M.	Army
2,562,305	Saw Tooth Wave Generator	Ellsworth, L. D. Washburn, C. A.	Army
2,562,309	Radio Receiver Control Apparatus	Frederick, A. H. Swarthout, C. J. Greenwood, I. A.	Army
2,562,319	Electron Discharge Device of the Cavity Resonator Type with Feedback.	Livingood, J. J. Salisbury, W. W. Welch, E. S.	Army
2,562,323	Variable Frequency Cavity Resonator.	Martin, E. G.	Army
2,562,332	Tilted Slot Antenna	Riblet, H. J.	Army
2,562,341	Alternating Azimuth Sweep	Starr, M. A.	Navy
2,562,342	Transmitter Output Coupling Circuit	Steigerwalt, O. I.	Army
2,562,645	Electrical Scaling Circuit	Robinson, S. Schloss, B.	AEC
2,562,660	Pulse Generating Circuit	Britton, C.	Navy
2,562,682	Remote Control System	Schmitt, O. H.	Navy
2,563,967	Cathode Ray Tube Sweep Circuit	Sherwin, C. W.	Navy
2,563,998	Direction Finding Apparatus	Foster, D. D.	Army
2,564,000	Pulse Generator System	Gaffney, F. J. Reed, W. O.	Army
2,564,005	Automatic Frequency Control System.	Halpern, J. Pound, R. V.	Army
2,564,006	Precision Angle Marker	Haworth, L. J. Sherwin, C. W.	Army
2,564,030	Phase Shifting Device	Purcell, E. M.	Army
2,564,045	Modulator	Winter, D. F.	Army
2,564,694	Receiver Channel Switch for Object Locators.	Huber, W. A. Pope, W. T.	Army
2,566,020	High-Frequency Detecting Device	Fenn, W. H.	Navy
2,566,026	Back Illumination Device for Translucent Indicators.	Hughes, A. C.	Navy
2,566,034	Cam and Follower Mechanism for Complex Motion.	Roberts, R. A.	Navy
2,566,333	Frequency Selective Feedback Amplifier.	Huntoon, R. D.	Navy
2,566,858	Reverberation Control of Gain	Sebring, P. B.	Navy
2,567,197	Duplex Switch with Sum and Difference Frequency Receivers.	Fox, N.	Army
2,567,574	Integrating Circuit	Okrent, J. J.	Navy
2,567,718	Tapered Corrugated Line	Larson, R. W.	Navy
2,567,734	Signal Generator	Sayre, D.	Navy
2,567,742	Triggered Square Wave Voltage Generator.	Stabler, H. P.	Navy
2,567,744	High-Frequency Current Transformer.	Stanton, R. S.	Navy
2,567,746	Antenna	VanAtta, L. C.	Navy
2,567,748	Control of Wave Length in Wave Guides.	White, M. G.	Navy
2,567,749	Rotary Gap Modulator	Winter, D. E. Carlson, C. A.	Navy
2,567,825	Wave Guide Mixer	Pound, R. V.	Army
2,567,844	Communication System	Golian, S. E.	Army
2,567,846	Pulse Coding Circuit	Jacobsen, A. B.	Army

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2,567,850	Pulse Generator	Licklider, J. C	Army
2,567,851	Pulse-Blocking Circuit	Lipkin, H. J	Army
2,567,858	Scalloped Plural Dipole Antenna	Riblet, H. J Van Valkenburg, M. E.	Army
2,567,861	Cathode Ray Beam Intensity Control.	Silliman, R. M	Army
2,567,862	Communication System	Van Voorhis, S. N	Army
2,567,942	Direct Arithmetical Reading of Target Angle Values.	Kass, S Sperling, J. G.	Army
2,568,265	Radio Beacon and System Utilizing It.	Alvarez, L. W	Navy
2,568,319	Electronic Frequency Divider Apparatus Employing Delay Circuits.	Christensen, O. M	Navy
2,569,129	Spectrum Analyzer	Kamm, G. N	Navy
2,569,135	Zero Adjustment of Computers	Trischka, J. W Sack, H. S.	Navy
2,569,930	Listening Amplifier	Hanson, R. O	Navy
2,570,813	Wave Guide Attenuator	Joerndt, W. A Larson, R. W.	Navy
2,570,814	Wave Guide Attenuator	Joerndt, W. A	Navy
2,570,870	Electrical Bridge Compensation System for Magnetometers.	Schmitt, O. H Hidy, J. H.	Navy
2,570,893	Electronic Attenuator for Radar	Wilkes, G	Navy
2,571,021	Flexible Wave Guide	Early, H. C	Army
2,571,045	Amplifier Coupling Circuit	Macnee, A. B	Army
2,571,051	Direction Finder System	Mizen, C. A	Army
2,571,055	Traveling Detector for Waves propagated Through a Wave Guide.	Nordsieck, A. T	Army
2,571,060	Beacon Modulator Circuit	Reed, J. C	Army
2,572,043	Blind Landing System	McElhannon, R. J	Army
2,572,546	Recorder Drive Mechanism	Walton, C. E	Navy
2,572,975	Radio Antenna Scanning and Azimuth Marking Means.	Berger, F. B Slack, F. F.	Army
2,572,986	Radar Tracking System	Chance, B	Army
2,572,995	Antenna	Dunbar, A. S	Army
2,573,021	Compensated Plan Position Indicator	Higinbotham, W.A	Army
2,573,070	Range Indicating System	Stafford, J. W Garman, R. L.	Army
2,573,446	Voltage Gate Limiter	Ingalls, C. E	Navy
2,573,558	Pulse Generator	Fischman, M	Navy
2,573,748	Acoustic Ranging System, Including Magnetic Recording.	Weinstein, D. H Keiser, M.	Army
2,573,823	Altimeter Actuated by Cosmic Rays	Barghausen, J. W Van Allen, J.	Navy
2,573,840	Rate Measuring and Comparing Circuit.	Grass, A. M	Navy
2,574,433	System for Directional Interchange of Energy between Wave Guides and Free Space.	Clapp, R. E	Navy
2,574,437	Linear Delay Circuit	Reed, H. J	Navy
2,574,438	Computer Using Magnetic Amplifier	Miller, G. H Rossi, B. Sack, H. S. Beyer, R. T.	Navy
2,574,655	Apparatus for Focusing High-Energy Particles.	Panofsky, W. K Baker, W. R.	AEC
2,575,107	Constant Voltage Positive Bias Supply.	Hobbs, C. F Saunders, N. B.	Army
2,575,109	Selective Amplifier	Howes, D. E	Army
2,575,759	Counter Chronograph	Higinbotham, W.A McDaniel, B. D.	AEC
2,576,057	Plan Position Indicator Circuit	Washburn, C. A	Navy
2,576,146	Rapid Scanning System	Ruze, J Woodyard, O. C.	Army
2,576,157	Wave Signaling System	Tykulsky, A	Army
2,576,255	Reflecting Fabric	Hudspeth, E. L Nash, J. P.	Navy
2,576,329	Variable Bandwidth Circuit	Bell, P. R	Navy
2,576,339	Variable Rate Sweep Voltage Generator.	Gray, J. W	Army
2,576,346	Electrical Marker Generator Circuit	Johnston, L. H	Army

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2,576,429	Single Side Band Signal Generator	Villard, O. G	AF
2,576,601	Method of Accelerating Ions	Hays, E. E	AEC
2,576,661	Pulse Shaping Circuit	Wouters, L. F	AEC
2,576,929	Direction Finding Device	Ercolino, M	Army
2,576,938	Vacuum Tube Amplifier	Hiatt, V. H	Navy
2,577,499	Pulse Measuring Device	Anderson, W. C	Army
2,577,500	Absorbing Means for Delay Lines	Arenberg, D. L	Army
2,577,502	Directional Radar System	Bainbridge, K. T	Army
2,577,506	Amplifier	Belleville, L. M	Army
2,577,510	Microwave Filter	Cohn, S. B	Army
2,577,511	Tunable Radio Frequency Filter	Cohn, S. B	Army
2,577,512	Communication System	Cooper, H. S Schultz, H. L.	Army
2,577,520	Radio Frequency Transponder	Hare, D. G	Army
2,577,522	Electrical Pulse Generating Circuit	Hite, G Whitham, G. E.	Army
2,577,540	Wave Guide T Bridge Detecting Apparatus.	Pound, R. V	Army
2,577,707	Pulse Transformer	Kerns, Q. A Baker, W. R.	AEC
2,578,253	Pulse Modulator	Lawrance, R. B	Navy
2,578,256	Coincidence-Integrating Circuit	MacNichol, E. F	Navy
2,578,258	Sweep Generator	McConnell, R. A Olson, V. A.	Navy
2,578,263	Spark Gap Modulator	Perkins, J. R	Navy
2,578,268	Voltage Clamping Circuit	Sherwin, C. W	Navy
2,578,273	Electronic Time Delay Device	Wachtell, G. P	Navy
2,578,758	Receiver Attachment for Instantaneous Direction Finders.	Stiber, S	Army
2,578,838	Crystal Detector Superregenerative Receiver.	Reed, J. C	Navy
2,578,908	Electrostatic Generator	Turner, C. M	AEC
2,579,223	Regulated Power Supply	Baker, W. R	AEC
2,579,231	Electromagnetically Operated Counter.	Goldberg, H. D Goldberg, M. I.	AEC
2,579,235	Rectifier System	Kerns, Q. A	AEC
2,579,496	Switch Arrangement on Phonograph Pickup.	Huston, W. D Brady, J. M.	Army
2,579,542	Pulse Transformer Circuit	Bostick, W. H	Navy
2,580,213	Pulse Discrimination Circuit Responsive to Double Sets of Pulses.	Bess, L	Army
2,580,453	Remote-Control System for Aircraft	Murray, P. R Bright, D. C.	Army
2,580,592	Apparatus for Broad-Band Radio Transmission.	Pound, R. V	Navy
2,582,190	Saw Tooth Voltage Generator	Corson, D. R Free, W. G.	Navy
2,582,202	Electrical Breakdown Device	Jacob, C. W	Navy
2,582,205	Compound Protective Device for Radio Detection Systems.	Longacre, A	Navy
2,582,282	Gaseous Discharge Device	Rothstein, J	Army
2,582,596	Phase Detector Circuit	MacRae, D	Navy
2,582,603	Circuit for Neutralization of Frequency Divider Chains.	Phelan, J. K	Navy
2,582,604	Apparatus for Broad-Band Radio Transmission.	Pound, R. V	Navy
2,582,608	Range Marker Generator	Sherwin, C. W	Navy
2,582,971	Pulse Echo Distance and Direction Finding.	Dunmore, F. W	Com
2,583,469	Calibration Unit for Cathode-Ray Tubes.	Chun, M. E	AEC
2,583,531	Reverberation Control of Gain	Hathaway, J. L	Navy
2,583,953	Electrical Apparatus	Kraus, J. D	Army
2,584,034	Electronic Marker Circuit	Lee, R. W	Army
2,584,144	Positive Pedestal Switched Video Tube.	Maresca, P. T	Army
2,584,386	Band Pass Filter Network	Hare, D. G	Navy
2,584,399	Rotatable Wave Guide Joint	Preston, W. M	Navy

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2,584,402	Acoustic Coupler for Earphones	Volkmann, J	Navy
2,585,069	Electrical Circuit for Preventing Excessive Transients.	Ziegler, H. K	Army
2,585,679	High-Voltage Regulator	Priedigkeit, J	AEC
2,585,803	Pulse Width Discriminator Circuit	Longmire, C. L	Army
2,585,855	Radar Ground-Controlled Approach System for Aircraft.	Sherwin, C. W Johnston, L. H.	Army
2,585,868	Sector Scanning Radar Device	Spaulding, C. P	Army
2,586,160	Reproducing Apparatus	Handel, N. E	Navy
2,586,167	Oscillator	Kamm, G. N	Navy
2,586,869	Waterproof Pilot Lamp	Soulthorpe, R	Army
2,586,894	Radio Receiver	Williams, E. M Gardner, B. R.	Army
2,587,426	Pulse Forming Network	Aiken, W. R	AEC
2,587,610	Directional Radar System	Fox, B	Army
2,587,995	System for Guiding Airplanes in Flight.	Griggs, D. T	Navy
2,588,114	Cathode-Ray Tube Circuit	Haworth, L. J	Navy
2,588,427	Condenser Charge Regulation	Stringfield T. W	Int
2,588,564	Thermoelectrically Balanced Meter Network.	Pawlicki, G. S	AEC
2,588,789	Neutron Detector	Zinn, W. H	AEC
2,589,246	Oscillator	Grimm, H. H	Army
2,589,403	Transducer Construction and Method.	Kurie, F. N	Navy
2,589,767	Voltage Pulse Generating Circuit	Bess, L	Army
2,589,773	Vernier Ranging Circuit	Chance, B Fredrick, A. H.	Army
2,589,807	Electrical Integration Circuit	Higinbotham, W.A	Army
2,589,813	Antenna Positioning System	Hulsizer, R. I	Army
2,589,818	Antennas	King, R. W	Army
2,589,833	Pulse Discriminator Circuit	Longmire, C. L Sudman, I. H.	Army
2,589,838	Single Side Band Modulator	McConnell, R. A	Army
2,589,843	Ultrahigh-Frequency Mixing Circuits	Montgomery, C. G	Army
2,589,851	Pulse Length Discriminator	Orpin, L. H	Army
2,589,852	Mechanical Tracking Device	Overacker, H. E	Army
2,589,860	Altitude Indicator System	Pike, B. W	Army
2,589,861	Microwave Frequency Modulated Transmitter.	Pound, R. V	Army
2,589,883	Schmidt Type Optical Projection System for Indicating Devices.	Soller, J. T Starr, M. A.	Navy
2,589,885	Tunable Magnetron	Sonkin, S	Army
2,589,903	Tunable Magnetron Oscillator	Vitter, A. L	Army
2,590,104	Direct-Coupled Amplifier	King, H. L	Int
2,590,110	System for Producing an Encoding Device.	Lippel, B	Army
2,590,863	Cold Cathode Gas Tube Amplifier	Jacobs, H Martin, J. R.	Army
2,590,867	Noise Reducer in Scintillation Counting.	Kallman, H	Army
2,591,088	Video Blanking Circuit	Millman, J Allen, R.	Navy
2,591,114	Frequency Divider	Anderson, W. C	Navy
2,591,247	Coincidence Amplifier	Farnsworth, H. D	AEC
2,591,731	Measuring System	Shapiro, G	Army
2,591,821	Modulator Circuit	Jacobsen, A. B	Navy
2,591,837	Method and Apparatus for Signaling Employing Polarized Lights.	Lee, P. H	Navy
2,591,998	Leak Detector	Baker, W. R	AEC
2,592,193	Means for Reducing Amplitude Distortion in Cathode-Follower Amplifiers.	Saunders, N. B	AF
2,592,416	Indicating Devices for Radioactivity Intensity.	Groth, E. J	AEC
2,592,738	Electronically Controlled Low Impedance Phase Shifting Device.	Rich, S. R	Navy
2,592,750	Impedance Meter	Selove, W	Navy
2,593,120	Wave Guide Transmission System	Dicke, R. H	Army

Patent No.	Title of Invention	Inventor	Agency
2,593,427	Counterpoise	Fill, J. V	Army
2,593,474	Antenna Matching Section	Meier, A. S Coleman, P. D.	Army
2,593,948	Distributed Coincidence Circuit	Wiegand, C. E Chamberlain, O.	AEC
2,594,104	Linear Sweep Circuits	Washburn, C. A	Navy
2,594,212	Ion Gauge Mounting	Proudfoot, C. B	AEC
2,594,328	Antenna Switching System	Marchetti, J. W	Army
2,594,535	Multiple Channel Electronic Switch	Bertram, S	Navy
2,594,703	Photomultiplier Tube Circuit	Wouters, L. F	AEC
2,594,732	Prefired Transmit-Receive Box System.	Cork, B. B	Navy
2,594,839	Electrical Apparatus	Alford, A	Army
2,594,854	Aerial Cable with External Radio Signal Reflection Correction.	Block, F	Army
2,594,871	Antenna	Chu, L. J Smith, W. O.	Army
2,594,874	High-Frequency Dissipating Load	Cohn, S. B Early, H. C.	Army
2,594,912	Electrical Driving Circuit	Gray, J. W	Army
2,594,965	Radio Pulse Transmitter with Rotating Antenna.	McKendry, J. K	Army
2,594,983	Transmission Line	Pease, M. C	Army
2,594,989	Magnetic Contouring System	Powell, W. M	AEC
2,595,251	Short-Circuiting Contractor for Direct-Current Circuits.	Harrison, L	Int
2,595,301	Line Pulse Modulator	Sager, I	Army
2,595,552	Photomultiplier Coincidence Circuit	Thomas, R. E	AEC
2,595,622	Fission Indicator	Wiegand, C. E	AEC
2,595,791	Transducer	Hunt, F. V	Navy
2,595,912	Turbine Rotated Antenna with Electromagnetic Answer-Back Means.	Alford, A	Army
2,596,460	Multichannel Filter	Arenberg, D. L	Navy
2,596,500	Pocket Radiation Alarm	Molloy, E. W	AEC
2,596,956	Electronic Relay Circuit	Nierman, L. G	AEC
2,596,984	Pulse System	Cook, J. H	Army
2,597,005	Method of Calibrating Microphones	Kendall, J. M	Navy
2,597,013	Pulse Modulator Circuit	Marchetti, J. W	Army
2,597,143	Wave Guide Joint	Aron, W. A	Navy
2,597,144	Electromagnetic Wave Control Structure.	Clapp, R. E	Navy
2,597,214	Pip Selector	Woodbury, R. B	Navy
2,597,297	Test Set for Pulse Echo Radio Locators.	Corson, D. R Schultz, H. L.	Army
2,597,303	Radio Frequency Vacuum Tube Voltmeter.	Dicke, R. H	Army
2,597,313	Antenna	Gardner, J. H	Army
2,597,315	Computer for Solving Right Triangles	Gray, J. W	Army
2,597,322	Pulse Generator Circuit	Higinbotham, W. A.	Army
2,597,339	Directional Antenna	Krutter, H	Army
2,597,340	Ultra-High Frequency Noise Generator.	Kuper, J. B Waltz, M. C.	Army
2,597,348	Range Height Indicator	Longacre, A Pollard, E. C.	Army
2,597,349	Radio Navigational Device	Longmire, C. L	Army
2,597,352	Decoding Device	MacNichol, E. F	Army
2,597,353	Sweep and Range Circuit	MacNichol, E. F	Army
2,597,358	Panoramic Receiver	McCouch, G. P Reynolds, D. K.	Army
2,597,360	Electron Ratchet Tube	Moon, R. J	Army
2,597,391	Antenna	Sichak, W	Army
2,597,392	Antenna	Silliman, R. M	Army
2,597,725	Balanced Demodulator	Hales, E. B	Navy
2,597,853	Unbalanced to Balanced Line Transformer.	Coleman, P. D	Army
2,597,993	Tunable Plug-In Assembly for High-Frequency Oscillators.	Hetland, J. M	Navy
2,599,182	Pulse Type Transformer	Kerns, Q. A	AEC

Patent No.	Title of Invention	Inventor	Agency
2,599,188	Magnetic Peeler for Proton Synchrotron.	Livingston, M. S.	AEC
2,599,777	Gain Control Device for Radio Receivers.	Pierce, J. A.	Navy
2,599,890	High Voltage Choked Filament Feed.	Bostick, W. H.	Navy
2,599,895	H–Plane Horn	Chu, L. J.	Navy
2,599,905	Modulator	Fano, R. M.	Navy
2,599,933	Superregenerative Microwave Receiver.	Neher, L. K.	Navy
2,599,945	Voltage Stabilizer	Schmitt, O. H.	Navy
2,599,964	Stabilized Frequency Divider Circuit.	Woodbury, R. B.	Navy
2,600,057	High-Voltage Multiple Core Transformer.	Kerns, Q.A.	AEC
2,600,151	Ion Producing Mechanism	Backus, J. G.	AEC
2,600,172	Direct-Current to Alternating-Current Signal Converter.	St. John, E. E.	AEC
2,600,179	Split Cylinder Antenna	Alford, A.	Army
2,600,186	Cavity Resonator	Banos, A.	Army
2,600,209	Electrical Navigation Apparatus	Cole, A. D.	Army
2,600,225	Temperature Compensated Resonant Cavity.	Ehrenfried, A. D.	Army
2,600,255	Moving Target Indication Radar System.	McConnell, R. A.	Army
2,600,260	Ultrahigh-Frequency Panoramic Receiver.	Park, D. A.	Army
2,600,264	Geometrical Computer	Proctor, W. G.	Army
2,600,268	Electrical Circuit for Producing Coding Pulses.	Sagalyn, P. L.	Army
2,600,270	Microsecond Delay Circuit	Saunders, N. B.	Army
2,600,274	Antenna	Sichak, W.	Army
2,600,278	Variable Capacity Cavity Tuning	Smullin, L. D.	Navy
2,600,891	Vacuum System Leak Detector	MacNeille, S. M.	AEC
2,600,936	Method and Apparatus for Measuring Low Pressures and Related Conditions.	Stone, W. G.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,601,226	Noise Generator	Schmitt, O. H.	Navy
2,601,354	Electronic Differential Relay System.	Wylie, D. L.	Int
2,602,827	Wave Guide Incident Wave Measurement.	Miller, T.	Navy
2,602,841	Protective Relay	Applegate, L. M. Spaulding, L. R.	Int
2,602,844	Field Strength Recorder	Schmitt, O. H.	Navy
2,603,088	Electrical Circuit for Straight Course Navigation.	Mosher, R. K.	Army
2,603,708	Overload Suppressor	Anger, H. O.	Army
2,603,743	Electronic Duplexing Device	Lawson, J. L.	Army
2,603,744	Tuning Mechanism	Larson, R. W.	Army
2,603,745	Panoramic Receiving System	McCouch, G. P.	Army
2,603,748	Frequency Detector	Bell, P. R.	Army
2,603,752	Voltage Pulse Generator	Winter, D. F.	Army
2,603,763	Vacuum Tube Oscillator	Neher, H. V.	Army
2,604,518	Radio Control System Receiver	Oliver, N. J.	Navy
2,604,590	Cathode-Ray Tube Sweep Circuit	Wilson, V. C.	Navy
2,604,594	Arrangement for Varying Wave Lengths in Coaxial Lines.	White, M. C.	Navy
2,604,608	Time Wave Generating System	Moore, J. R.	Army
2,604,609	Cathode-Ray Tube Sweep Circuit	Wilson, V. C.	Navy
2,604,644	Corner Reflector Float Marker	Tilton, P. D.	Navy
2,604,698	Tilt Correcting Director	Ewing, W. B.	Navy
2,604,705	Radar Simulator	Hisserich, C. A. Bretell, G. A.	Navy
2,605,072	Integral-Drive Magnetometer Head.	Klein, N. E. Brattain, W. H.	Navy
2,605,310	Rotary Spark Gap Modulator	White, H. J.	Navy
2,605,340	Telemetering System	Disney, V. H.	Navy
2,605-341	Directional Indicator System	Vacquier, V. V. Adkins, J. N.	Navy
2,605,345	Modulator	Cohen, M. J.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,605,346	Waterproof Microphone	Gogolick, R. M. Brown, R. L.	Navy
2,605,356	Radio-Frequency Power Divider Circuit.	Ragna, G. L.	Navy
2,605,357	Power Divider Circuit	Salisbury, W. W.	Navy
2,605,358	Low Pass Filter	Neher, L. K.	Navy
2,605,394	High-Frequency Radio Beacon Signaling.	Van Voorhis, S. N. Kirby-Smith, J. S. Kuper, J. B.	Navy
2,605,399	Ultrahigh Frequency Mixer	Pound, R. V.	Navy
2,605,404	Pulse Generator	Valley, G. E.	Navy
2,605,405	Pulse Forming Circuit	Lentz, J. J.	Navy
2,605,406	Multivibrator Saw-Tooth Generator.	Bartelink, E. H. Torode, S. W. Walker, R. J.	Navy
2,605,407	Blocking Oscillator	Perkins, G. D.	Navy
2,605,408	Coordination Circuit	Millman, J.	Navy
2,605,409	Pulse Narrowing Circuit	Forbes, G. D.	Navy
2,605,411	Directional Slot Antenna	Riblet, H. J.	Navy
2,605,412	Collinear Sleeve Type Antenna Array.	Riblet, H. J.	Navy
2,605,413	Antenna System with Variable Directional Characteristic.	Alvarez, L. W.	Navy
2,605,414	Fan Beam Radiator	Keary, T. J.	Navy
2,605,415	Parabolic Reflector	Mason, S. J.	Navy
2,605,416	Directive System for Wave Guide Feed to Parabolic Reflector.	Foster, J. S.	Navy
2,605,418	Scanning System	Grass, A. M.	Navy
2,605,419	Wave Guide Feed for Illuminating Parabolic Reflectors.	Van Atta, L. C.	Navy
2,605,420	Pressurized Antenna Feed	Jaffe, D. L.	Navy
2,605,421	Tuner for Lighthouse Tube Cavity Resonators.	Schultz, H. L. Cooper, H. G.	Navy
2,605,423	Blocking Oscillator	Bess, L.	Navy
2,605,424	Blocking Oscillator	Janvrin, W. A.	Navy
2,605,430	Automatic Gain Control Circuit for Electron Multiplier Phototubes.	Marcy, H. O.	Navy
2,605,445	Magnetron	Reich, H. J.	Navy
2,605,450	Computer Automatic Reset	Nettleton, L. A. Sommers, H. S.	Navy
2,605,451	High Performance Amplidyne Servomechanism.	Ward, N. E. Mayer, R. W. Mersman, W.	Navy
2,605,452	Stabilizing System Using an Amplidyne.	Ney, E. P. Hereford, F. L. Whitehead, W. D. Kuhlthau, A. R.	Navy
2,605,453	Antenna Sector Scanning Control	Miller, E. E.	Navy
2,605,459	Monitoring Apparatus for Radio Pulse Transmission Systems.	Cook, J. H.	Navy
2,605,461	Radio Echo Detection System	Koehler, J. F.	Navy
2,605,462	Plan Position Indicator System	Reed, W. O. Haworth, L. J.	Navy
2,605,464	Synchronized Pulse-Echo Detection System.	Moore, J. R.	Army
2,605,556	Radar System Operational Training System.	Jones, E. M.	Army
2,605,962	Instantaneous Square-Root-Extracting Circuit.	Berger, F. B.	Army
2,606,248	Transmit-Receive Device	Dicke, R. H.	Army
2,606,249	Tunable Cavity Resonator Transmit-Receive Device.	Cork, B. B.	Army
2,606,282	Pulse Transponder	Lipkin, H. J.	Army
2,606,289	Electrical Pulse Generator	Stanton, R. S.	Army
2,606,312	Dynamic Motor Braking and Reversing Circuit.	Rogers, J. R.	Army
2,606,318	Radar System Having Spiral and Conical Scanning Antenna and Tridimensional Indicator.	Haworth, L. J. Purcell, E. M.	Army
2,606,966	Phase Shifting Network	Pawley, M. G.	Navy
2,607,849	Control of Polarization in Wave Guides and Wave Guide Systems.	Purcell, E. M. Montgomery, C. G. Montgomery, D. D.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,607,861	Space Charge Reaction Device	Wagner, H. M	Army
2,608,654	Pulse-Forming Circuit	Street, J. C	Navy
2,609,432	Flashover Indicator	Steen, K. R	Int
2,609,449	Cavity Resonator	Otis, E. G Salisbury, W. W.	Army
2,609,450	Radio Frequency Wattmeter	Early, H. C	Army
2,609,490	Automatic Tuning Control	Hollywood, J. M	Army
2,609,501	Pulse Width Discriminator Circuit	Guthrie, G. B	Army
2,609,527	Voltage Regulator Circuit	Raburn, L. E Woods, J. P.	Army
2,609,533	Electrical Measuring System	Jacobsen, A. B	Army
2,610,320	System of Radio Echo Detection	Hall, W. M	Navy
2,611,040	Nonplanar Printed Circuits and Structural Unit.	Brunetti, C	Army
2,611,087	Device for Radiating Circularly Polarized Waves.	Alford, A	Army
2,611,092	Automatic Frequency Control Circuit.	Smullin, L. D	Army
2,611,103	Standing Wave Ratio Indicator	Hollenberg, A. V	Army
2,611,125	Doppler Radar System	Dicke, R. H	Army
2,611,126	Radio Object Locating System having a Hyperbolic Sweep.	Irving, J. H	Army
2,611,847	Cam-Actuated Device	Scott, B. B	Navy
2,613,347	Modulator for Radiosonde Apparatus.	Todd, W	Army
2,613,627	Torpedo Depth Control System	Keto, A. I	Navy
2,614,233	Ruggedized Klystron Tube	Joerndt, W. A	Navy
2,614,250	Moving Target Pulse Echo Measuring System.	Stodola, E. K	Army
2,614,416	Force Measuring System Employing Piezocapacitors.	Hollmann, H. E	Navy
2,615,158	Radio Object Locating System	Stodola, E. K	Army
2,616,042	Stabilizer Arrangement for Cyclotrons and the Like.	Weeks, R. R	AEC
2,616,052	Fast Neutron Dosimeter	Hurst, G. S	AEC
2,617,042	Coincidence Circuit	Wouters, L. F	AEC
2,617,883	Circuit for Increasing Duration of Pulses.	Anger, H. O	Army
2,617,924	Wide Frequency Band Transmit-Receive Switch.	Jones, C. W	Army
2,617,925	Receiver Transmitter	Young, D. R	Army
2,617,934	Antenna Housing	McMillan, E. B Redheffer, R. M.	Army
2,617,937	Flared Horn Wave Guide Antenna	Van Atta, L. C	Army
2,617,946	Radiation Detector Circuit	Weller, B. L	AEC
2,617,973	Regulating System	Wolff, J. L Aldrich, D. F.	AEC
2,617,983	Moving Target Detecting System	Emslie, A. G	Army
2,618,750	Apparatus for Supplying Charge Material to Mass Spectrometers.	Parsegian, V. L Stevens, C. M.	AEC
2,619,539	Mode Changer	Fano, R. M	Army
2,619,597	High-Frequency Oscillator	Mlynczak, L. L	Army
2,619,601	Radioactivity Survey Apparatus	Zollers, S. M	AEC
2,619,733	Apparatus for the Maintenance of True Bearing.	Gillett, G. D Stephenson, R. G. Horton, J. W. Haynes, J. B.	Navy
2,620,381	Magnetometer Gradiometer Apparatus and Method.	Mayes, F. M Tickner, A. J.	Navy
2,621,294	Circuit for Providing Timed Electrical Impulses.	Podbielniak, T	Navy
2,622,204	Mass Spectrograph	Shaw, A. E Rall, W.	AEC
2,623,605	Frequency Band Generator	Edelman, S London, A.	Com
2,624,041	Amplitude Modulator of the Outphasing Type.	Evans, W. E	AF
2,624,044	Precision Range Finding Apparatus	Schooley, A. H	Navy

SUBGROUP 36–62—Radio tubes

The following patents relate to establishments engaged in manufacturing radio receiving and transmitting tubes. Electronic tubes other than radio receiving and transmitting tubes are classified in Subgroup 36–93.

Patent No.	Title of Invention	Inventor	Agency
2,334,716	Spiral Filament	Litton, C. V	Army
2,420,055	Testing Device	Sanders, E. R	Navy
2,422,469	Electron Emitting Cathode	Coomes, E. A	Army
2,423,819	Vacuum Tube with Coupling-Feed-Back-Electrode Arrangement.	Chevigny, P. G	Army
2,431,026	Magnetostrictive Oscillator	Bundy, F. P	Navy
2,435,331	Vacuum Tube Amplifier	Street, J. C	Navy
2,437,880	Cathode Support Structure	Kusch, P	Army
2,440,203	Cathode Structure	Kusch, P	Army
2,440,308	Oscillator Structure	Storck, E. A	Army
2,443,794	Electrical Apparatus	MacNichol, E. F	Army
2,444,193	Plan Position Indication System	Gillette, F. N Haworth, L. J.	Army
2,446,564	Clamping Device	Vezzosi, F. D	Army
2,446,802	Pulse Shaping Circuit	Bell, P. R	Army
2,449,524	Oscilloscope Device	Witherby, T. H Farnsworth, H. E.	Army
2,450,618	Indicating Device	Smullin, L. D Wiesner, J. B.	Army
2,451,825	Oscillator Tube with Tunable Coaxial Resonator.	Guarrera, J. J	Army
2,452,044	High Emission Cathode	Fox, B	Army
2,454,204	Cathode-Ray Tube	Raymond, R. C	Army
2,460,794	Vacuum Tube Grid Construction	Selvidge, H	Navy
2,463,372	Cathode Structure for Magnetrons	Forsbergh, P. W	Army
2,463,388	Contamination Resisting Hat for Magnetrons.	Hutchinson, F	Army
2,463,398	Cathode Structure for Magnetrons	Kusch, P	Army
2,463,416	Anode for Strapped Magnetrons	Nordsieck, A. T	Army
2,468,655	Diode Detector for Hyperfrequencies	Cole, P. A Kuper, J. B.	Army
2,472,200	Variable Frequency Magnetron Circuit.	Everhart, E	Army
2,476,297	Shock Testing Device	Harris, E. R	Army
2,483,226	Electronic Noise Generator	Newman, E. B	Navy
2,492,204	Electrodeposition of Gold on Tantalum.	Van Gilder, R. D	Army
2,498,577	Combined Oscillator and Reactance Tube Structure.	Rambo, W. R	Army
2,499,839	High-Speed Mercury Diffusion Pump	Stoltenberg, G. R	AEC
2,501,095	Electron Tube of Velocity Modulation Type.	Record, F. A	Army
2,501,110	Indicating Circuit	Walker, R. M	Army
2,512,779	Control for Plan Position Indicator	Sherwin, C Meagher, R. E.	Navy
2,513,207	Method of Making Microwave Tubes	Roberts, W. V	Navy
2,518,450	Cushioned Package of Fragile Articles.	Cowen, S. T Shriro, M. A.	Army
2,543,439	Method of Manufacturing Coated Elements for Electron Tubes.	Coomes, E. A Forsbergh, P. W.	Army
2,548,283	Ion Gauge	Bashkin, S	AEC
2,548,770	Neutralizing Circuits	Caraway, J. B	Army
2,550,460	Monitoring Circuit	Farly, G. M Mack, D. A.	AEC
2,557,632	Holder for Electron Discharge Devices.	Clark, J. L	Army
2,557,700	Resnatron Anode with Cooling Means.	Sloan, D. H	Army
2,561,702	Method of Skiatron Clean-Up	Kelly, H. C	Navy
2,571,439	System for Determining Tube Characteristics.	Glass, F. M	AEC
2,573,017	Cathode-Ray Tube Apparatus for Producing Sector Scan.	Haworth, L. J	Army

Patent No.	Title of Invention	Inventor	Agency
2,576,129	Nonemitting Electron Tube Grid	Levin, I.	Army
2,582,282	Gaseous Discharge Device	Rothstein, J.	Army
2,583,469	Calibration Unit for Cathode-Ray Tubes.	Chun, M. E.	AEC
2,585,741	Magnetron having Modulating Means.	Clogston, A. M.	Army
2,606,307	Tunable Magnetron	Pease, M. C. Record, F. A.	Army
2,607,861	Space Charge Reaction Device	Wagner, H. M.	Army
2,610,387	Method of Making Grid Assemblies	Borland, E. E. Hobart, G. A. Nawrocki, C. Z. Neher, H. V.	Army
2,611,112	Three-Element Thermionic Structure.	Kuthe, H. K. Bloemeke, R. H.	Army
2,614,233	Ruggedized Klystron Tube	Joerndt, W. A.	Navy
2,615,137	High-Power Vacuum Tube	Duke, S. M.	AEC
2,617,962	Velocity Modulation Tube	Keuffel, J. W.	Army

SUBGROUP 36–64—Telephone and telegraph equipment

The following patents relate to establishments engaged in manufacturing telephone and telegraph equipment, and parts specifically designed for inclusion in telephone and telegraph circuits. Patents regarding radio-telephone and radio-telegraph apparatus and supplies are classified in Subgroup 36–61, and radio tubes in Subgroup 36–62.

Patent No.	Title of Invention	Inventor	Agency
2,108,833	Telegraphic Keying Circuit	Wallace, J. D.	Navy
2,121,778	Sound Translating Apparatus	Ballantine, S.	Army
2,121,779	Sound Translating Apparatus	Ballantine, S.	Army
2,121,780	Sound Translating System	Ballantine, S.	Army
2,121,781	Sound Translating Device	Ballantine, S.	Army
2,122,191	Sound Translation Apparatus	Ballantine, S.	Army
2,165,123	Contact Microphone	Ballantine, S.	Army
2,165,124	Throat Microphone	Ballantine, S.	Army
2,414,129	Variable Sensitivity Sound-Powered Receiver.	Volsk, N. T.	Army
2,431,341	Nonpositional Indicator for Switchboards.	Pereslegin, A.	Army
2,450,441	Nonpositional Line Signal	Mitchell, J. G.	Army
2,456,346	Sound Shield for Telephone Transmitters.	Veneklasen, P. S.	Army
2,465,985	Noise Shield for Handsets	Veneklasen, P. S.	Army
2,468,749	Telephone Switchboard System	Groh, B. C.	Army
2,489,277	Flexible Acoustic Tube	Faralla, R. A.	Army
2,505,519	Pressure-Compensated Telephone Unit.	Beranek, L. L.	Army
2,521,824	Electronic Switch	Brown, A. D.	Army
2,547,009	Telemetering System	Huston, W. D. Brady, J. M.	Army
2,584,386	Band Pass Filter Network	Hare, D. G.	Navy

SUBGROUP 36–69—Communication equipment, not elsewhere classified

The following patents relate to establishments engaged in manufacturing electrical communication equipment, not elsewhere classified, such as electric signaling apparatus, audible signals, burglar alarms, electric traffic signals, and railroad signaling devices.

Patent No.	Title of Invention	Inventor	Agency
2,558,337	Noise Generator	Chinn, H. A. Dyer, J. N.	Army
2,587,301	Method of Sound Transmission	Ewing, W. M.	Navy
2,601,247	Recording System	Brady, J. M.	Army
2,617,380	Signaling Apparatus	Showers, R. M. Weisbecker, A. L.	Army

SUBGROUP 36–91—Storage batteries

The following patents relate to establishments engaged in manufacturing storage batteries.

Patent No.	Title of Invention	Inventor	Agency
2,395,998	Battery Removing Tool	Falk, G. E	Navy
2,442,380	Method and System for Warming Dry Batteries.	Schrodt, J. P Craig, D. N. Vinal, G. W.	Com
2,461,534	Leak Resistant Electrical Cell	Ellis, G. B	Army
2,501,673	Powdered Zinc Anode for Primary Cells.	Glassner, A	Army
2,515,204	Storage Battery Plate	Evans, L	TVA
2,526,640	Primary Cell	Daniel, A. F	Army
2,531,952	Battery Venting Apparatus	Smith, F. H Couperus, P. G.	Navy
2,601,267	Primary Alkaline Cell	Ellis, G. B	Army
2,613,877	Supersonic Treatment of Battery Materials.	Hunrath, G	Army

SUBGROUP 36–92—Primary batteries

The following patents relate to establishments engaged in manufacturing dry and wet primary batteries.

Patent No.	Title of Invention	Inventor	Agency
2,445,306	Electrolyte for Primary Cells Comprising Lithium Bromide.	Lawson, H. E	Navy
2,447,493	Sealing Device for Dry Cells	Daniel, A. F	Army
2,449,550	Battery Adapter	Eichberg, R. L Montague, H. R.	Army
2,457,810	Sealing Device for Dry Cells	Ellis, G. B	Army
2,461,534	Leak Resistant Electrical Cell	Ellis, G. B	Army
2,462,880	Primary Cell of the Lead-Zinc Type	Mandel, H. J	Army
2,472,376	Electric Cell of the Immersion Type	Kearsley, W. K Winslow, A. F. Liebhafsky, H. A.	Navy
2,472,379	Battery Electrolyte with Phosphoric Acid.	Lawson, H. E	Navy
2,480,839	Alkaline Primary Cell	Daniel, A. F	Army
2,500,169	Battery Filler Device Having a Puncturing Element for Piercing an Evacuated Battery Enclosing Can.	Ellis, G. B	Army
2,501,673	Powdered Zinc Anode for Primary Cells.	Glassner, A	Army
2,517,132	Primary Cell	Piper, G. T Sutton, O. B.	Navy
2,526,640	Primary Cell	Daniel, A. F	Army
2,566,242	Removable Closure for Deferred Action Batteries.	Naymik, J	Navy
2,568,340	Removable Closure for Deferred Action Batteries.	Jennings, L. D Naymik, J.	Navy
2,572,017	Dry Battery Cell	Ellis, G. B	Army
2,575,337	Sealing Device for Dry Cells	Ellis, G. B	Army
2,580,415	Primary Cell Structure	Ellis, G. B	Army
2,582,973	Sealing Means for Primary Alkaline Dry Cells.	Ellis, G. B	Army
2,585,922	Hermetically Sealed Alkaline Dry Cell.	Ellis, G. B	Army
2,601,267	Primary Alkaline Cell	Ellis, G. B	Army
2,607,809	Dry Cell Assembly	Pitzer, E. C	AEC
2,613,877	Supersonic Treatment of Battery Materials.	Hunrath, G	Army
2,616,939	Sponge Cadmium Electrode and Method of Making Same.	Fischbach, A	Army
2,620,369	Plastic-Cased Dry Cells	Daniel, A. F	Army

SUBGROUP 36–93—X-ray and therapeutic apparatus and non-radio electronic tubes

The following patents relate to establishments engaged in manufacturing electrotherapeutic and electromedical apparatus, X-ray apparatus and tubes, lamps for infrared and ultraviolet radiation, and nonradio electronic tubes.

Patent No.	Title of Invention	Inventor	Agency
2,064,517	Photoelectric Cell Circuit	Brice, B. A	USDA
2,401,191	Telescopes for Receiving and Detecting Ultraviolet Light.	Rosett, W	Navy

Patent No.	Title of Invention	Inventor	Agency
2,410,499	Stimulator	Hinsey, J. C Geohegan, W. A.	Army
2,418,523	Method and Apparatus for Producing Radiographs.	Neddermeyer, S. H. Kerst, D. W.	AEC
2,441,324	Radiation Responsive System	Morgan, R. H Hodges, P. C.	Army
2,454,841	Apparatus for Detecting the Presence and Position of an Invisible Body by Infrared Radiation.	Sackville, W	Army
2,462,140	Portable Battery-Powered Gamma Ray Counting Rate Meter of High Sensitivity.	Spicer, H. C	Int
2,467,592	Driving Mechanism for X-Ray Grids	Morgan, R. H Hodges, P. C.	Army
2,473,956	Stereoscopic X-Ray Pictures with Betatron.	Kerst, D. W	Navy
2,485,903	VII Type Phosphor	Miller, N. F	Navy
2,486,866	Dual Phototube X-Ray Timer for Selective Exposure of Chest Films.	Morgan, R. H Hodges, P. C.	Army
2,488,315	Exposure Selecting Device for X-Ray Apparatus.	Morgan, R. H Hodges, P. C.	Army
2,492,204	Electrodeposition of Gold on Tantalum.	Van Gilder, R. D	Army
2,493,137	Voltage Doubling Circuits	Hansen, W. W	AEC
2,504,864	Reciprocator for X-Ray Apparatus	Morgan, R. H Hodges, P. C.	Army
2,504,865	Limit Timer for Protection of X-Ray Tubes.	Morgan, R. H Hodges, P. C.	Army
2,536,991	Radiation Detector	Wollan, E. O Pardue, L. A.	AEC
2,541,599	Radiography	Morrison, P	AEC
2,543,439	Method of Manufacturing Coated Elements for Electron Tubes.	Coomes, E. A Forsbergh, P. W.	Army
2,545,200	Method of Preparing Skiatronic Screens.	Fonda, G. R	Navy
2,548,283	Ion Gauge	Bashkin, S	AEC
2,548,770	Neutralizing Circuits	Caraway, J. B	Army
2,549,596	Beryllium Target and Method of Manufacture.	Hamilton, J. G Putnam, T. M. Wiens, J. H.	AEC
2,551,531	Radiation Counters	Freedman, M. S	AEC
2,554,316	Production of Radioactive Halogens	Reid, A. F	AEC
2,556,167	Crystal Analysis Apparatus	Coleman, J. E	Army
2,557,632	Holder for Electron Discharge Devices.	Clark, J. L	Army
2,561,702	Method of Skiatron Clean-Up	Kelly, H. C	Navy
2,574,681	Materials and Methods for Radiography.	Zinn, W. H	AEC
2,580,360	X-Ray Shield	Morrison, P	AEC
2,582,846	Microwave Amplifier	Neher, H. V	Navy
2,585,649	Reaction Comparision Apparatus	Hanson, A. O	AEC
2,590,925	Proportional Counter	Borkowski, C. J Fairstein, E.	AEC

MAJOR GROUP 37—TRANSPORTATION EQUIPMENT

The patents listed under this title relate generally to establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, ships, boats, and railroad equipment.

SUBGROUP 37–11—Motor vehicles

The following patents relate to establishments engaged in manufacturing or assembling complete passenger automobiles, trucks, commercial cars and busses, and special-purpose motor vehicles such as scout cars, personnel carriers, and amphibian motor vehicles. Tanks and tractors are classified in Subgroups 19–31 and 35–31, respectively.

Patent No.	Title of Invention	Inventor	Agency
2,424,219	Screen	Black, E. A	Army
2,432,259	End Gate for Amphibian Vehicles	Swennes, B. A	Navy
2,444,759	Wheeled Vehicles	Swennes, B. A	Navy
2,456,478	Selective Propulsion Means for Amphibious Craft.	Anderson, M. B	Navy
2,456,542	Amphibian Cargo Carrier	Swennes, B. A	Navy
2,459,470	Motor Vehicle Fuel Tank	Swennes, B. A	Navy
2,466,236	Amphibious Vehicle	Hecker, L. G	Army
2,487,397	Amphibian Tank	Swennes, B. A	Navy

SUBGROUP 37–14—Motor-vehicle parts and accessories

The following patents relate to establishments engaged in manufacturing motor-vehicle parts and accessories. Important products include motor-vehicle engines and parts, brakes and parts, clutches, axles, radiators, differentials, transmissions, wheels and frames, and automobile accessories not elsewhere classified, such as windshield wipers, and oil filters and strainers. Tires and tubes are classified in Subgroup 30–11, head lamps in Subgroup 34–71, and storage batteries in Subgroup 36–91.

Patent No.	Title of Invention	Inventor	Agency
2,281,913	Power Transmission Means	Brooks, S. H	Just
2,281,914	Lubricated Shaft and Gear Means	Brooks, S. H	Just
2,315,589	Power Transmission	Brooks, S. H	Just
2,324,061	Hinged Joint	Brooks, S. H	Just
2,324,062	Flexible Joint	Brooks, S. H	Just
2,330,552	Lubricated Hinged Shaft Joint	Brooks, S. H	Just
2,337,520	Bracket	Brooks, S. H	Just
2,342,625	Bracket	Brooks, S. H	Just
2,346,507	Gear Construction	Quinn, A. J	Just
2,369,435	Heat Transfer Composition	Coghill, R. D Milner, R. T.	USDA
2,384,476	Antivibration or Shock Absorber Mount.	Lane, D. L	Army
2,402,594	Resilient Mechanical Wheel	Beyer, W. O Tarn, T. R.	Army
2,425,508	Dust Separator, Especially for Carburetor Air Intake Ducts.	Chilton, T. H Lapple, C. E.	Navy
2,454,288	Heat-Pressure Operated Warning Switch.	Michaelson, M. L	Army
2,469,274	Electrical Switch	Rein, C	Treas
2,481,489	Filter	Becker, O. A	Army
2,488,361	Hydraulic Control Means for Internal Combustion Engines.	Witzky, J. E Lang, W. S. Jakob, R. J.	Army
2,517,464	Preheating System for Internal Combustion Engines.	Corcoran, W. B	AF
2,532,656	Hydraulic Damper	Backus, W. M Jarvis, C. W.	Navy
2,533,029	Odograph	McNish, A. G Tuckerman, B.	Army
2,568,576	Counterbalanced Crankshaft for Internal-Combustion Engines.	Witzky, J. E Lang, W. S. Jakob, R. J.	Army
2,575,360	Magnetic Fluid Torque and Force Transmitting Device.	Rabinow, J	Army

Patent No.	Title of Invention	Inventor	Agency
2,581,416	Spring Shock and Vibration Isolator	Irby, J. W	Army
2,595,239	Hydrospring Shock Absorber	Gay, H. P	Army
2,619,189	Lubricating System for Internal-Combustion Engines	Witzky, J. E Lang, W. S. Jakob, R. J.	Army
2,621,718	Pulse Jet Heater with Automatic Starting and Control System Therefor.	Krautter, W. F Staige, K. Kamm, W. I.	AF
2,622,713	High-Speed Magnetic Fluid Clutch	Rabinow, J	Army

SUBGROUP 37–22—Aircraft engines and engine parts

The following patents relate to establishments engaged in manufacturing aircraft engines and engine parts. Important products include internal-combustion and jet-propulsion engines; engine mount parts; air scoops; turbo supercharger, lubricating, cooling, and exhaust systems; nonelectric starters; and aircraft engine pumps.

Patent No.	Title of Invention	Inventor	Agency
2,369,435	Heat Transfer Composition	Coghill, R. D Milner, R. T.	USDA
2,425,508	Dust Separator, Especially for Carburetor Air Intake Ducts.	Chilton, T. H Lapple, C. E.	Navy
2,475,469	Ceramic Coating for Metals	Bennett, D. G Andrews, C. M.	AF
2,475,470	Ceramic Coating Material	Bennett, D. G Andrews, C. M.	AF
2,543,693	Combustion Apparatus	Hildestad, H. L	Navy
2,553,512	Gas Turbine Apparatus	Cotton, T. J	Navy
2,557,883	Jet Propulsion Exhaust Nozzle Apparatus.	Miller, E. F	Navy
2,557,898	Gas Turbine Diaphragm	Thompson, A. S	Navy
2,560,118	Fuel Feeding Apparatus for Gas-Driven Turbines.	Malone, J. L McKinnell, M.	Navy
2,563,532	Spontaneous Ignition of Gasoline and Nitric Acid.	Kistiakowsky, G. B	Navy
2,574,190	Turbine Apparatus	New, W. R	Navy
2,576,352	Fuel Governor for Jet Engines	Neal, R. A	Navy
2,578,275	Air-Free Lubricant Pump Discharge System.	Whiteman, I. R	Navy
2,588,728	Combustion Chamber with Diverse Combustion and Diluent Air Paths.	Hundstad, R. L	Navy
2,603,945	Jet Engine with Afterburner	Brown, C. R	Navy
2,619,189	Lubricating System for Internal-Combustion Engines.	Witzky, J. E Lang, W. S. Jakob, R. J.	Army

SUBGROUP 37–29—Aircraft parts and auxiliary equipment

The following patents relate to establishments engaged in manufacturing aircraft parts and auxiliary equipment. Important products include airframe assemblies, wing assemblies, flaps and dive brakes, elevators, fins, rudders, and other empennage assemblies, and alighting assemblies and parts such as landing and beaching gear, pontoons, and landing skis; auxiliary equipment such as deicing equipment, armament, turrets and turret drives, parachutes, targets, link trainers, and other auxiliary equipment specifically adopted for aircraft. Aircraft engines and parts are classified in Subgroup 37–22 and aeronautical instruments are found in Subgroup 38–11.

Patent No.	Title of Invention	Inventor	Agency
2,035,367	Means for Absorbing the Energy of a Falling Body.	Gibson, W. A	Army
2,128,169	Safety Indicator for Airplanes	Shanley, F. R	Navy
2,129,565	Deicing Attachment for Airplane Propellers.	Clay, W. C	Navy
2,146,724	Radio System for Collison Prevention.	Dunmore, F. W	Com
2,157,122	Warning System for Indicating the Proximity of Aircraft.	Dunmore, F. W	Com
2,182,706	Airplane Safety Device	Shanley, F. R	Navy
2,278,219	Airplane Safety Device	Shanley, F. R	Navy
2,361,438	Light Weight Plastic Composition and Method.	Turner, P. S	Com
2,389,132	Method of Attaching Electrical Conductors to Glider Tow Ropes.	Borgelt, E. H	Army

Patent No.	Title of Invention	Inventor	Agency
2,391,012	Bomb Release	Eyler, L. J	AF
2,395,827	Airplane Spray Unit	Husman, C. N Longcoy, O. M.	USDA
2,398,403	Junction Box for Rope Thimble	Borgelt, E. H	Army
2,402,143	Parachute Pack	Arenstein, G. H	Army
2,403,653	Shoulder Harness Take-Up and Inertia Lock.	Geohagan, W. A Phipps, R. E.	AF
2,405,414	Recoilless Gun Mechanism	Eksergian, C. L	Army
2,405,752	Bomb Release	Minshall, R. J Laudan, F. P. Emery, E. G.	AF
2,414,579	Rocket Launcher for Aircraft	Anderson, C. D Leighton, R. B. Wilts, C. H. Melzian, A. L.	Navy
2,426,585	Shock Absorbing Landing Gear	Bean, H. S Morey, F. C.	Navy
2,436,386	Calculator	Gossard, W. D	Army
2,445,517	Pendulum Controlled Electric Dive Angle Indicator.	Dilks, U. C	Navy
2,445,712	Auditory Tone Signal Indications for Flying.	Forbes, T. W	Navy
2,450,926	Parachute made of Self-Supporting Ribbons which are Composed of Broad and Narrow Bands.	Weinig, F. S	Army
2,450,992	Free-Fall Aerial Container	Sanderson, W. J	USDA
2,451,522	Rocket Projector	Uhl, E. G Skinner, L. A.	Army
2,451,856	Mechanical Device for Determining the Future Position of Aircraft.	Miller, E. E	Army
2,452,822	Reflector	Wolf, J. M	Army
2,454,853	Ribbon Parachute	Weinig, F. S	AF
2,456,606	Inert Gas Eliminator for High Altitude Oxygen Apparatus.	Martin, D. S Nachtrieb, N. D. Seegmiller, J. E.	Navy
2,468,483	Periodic Signaling Apparatus	Chambers, C. C Showers, R. M.	Army
2,469,274	Electrical Switch	Rein, C	Treas
2,470,457	Parachute Release Mechanism	Bancora, M. E	AF
2,473,922	Breathing Indicator	Tobias, C. A	AF
2,477,515	Arresting Gear	Greenwood, E. J Heffernan, R. C.	Navy
2,478,138	Parachute Release Mechanism	Tobias, C. A	AF
2,480,208	Radio Distance and Direction Indicator.	Alvarez, L. W	Army
2,480,867	Aircraft Instrument	Maris, H. B	Navy
2,481,542	Displacement Launcher for Projectile.	Schuyler, G. L	Navy
2,483,044	Delayed-Release Mechanism	Gongwer, C. A	Navy
2,483,385	Limit Stop Mechanism for Power Operated Gun Mounts.	Humphrey, P. E	AF
2,483,661	Discharge Device	Neas, C. C	Navy
2,485,909	Rocket Carrier	Mosteller, G. G	Navy
2,485,953	Aircraft Control System	Barth, T. H	Navy
2,486,779	Stall Warning Indicator	Fairbanks, A. J	Com
2,487,077	Colorimetric Gas Detection	Shepherd, G. M	Com
2,489,257	Control System and Landing Gear for Airborne Components.	Bean, H. S Morey, F. C.	Navy
2,494,600	Parachute Composed of Alternating Taut and Loose Ribbons.	Weinig, F. S	AF
2,498,997	Photoelectric Inclinometer and Accelerometer.	McLean, W. B Swift, I. H.	AF
2,499,012	Tow Target Carrier	Welsh, J. P Jewett, J. L.	AF
2,501,020	Antenna Structure	Barnes, R. B	Army
2,501,070	Antenna	Martinelli, E. A	Army
2,504,077	Cross-Wind Airplane Landing Gear	Loudenslager, O. W	Com
2,507,450	Oxygen Generator with Integrated Initiating Device.	Millikan, G. A Legallais, V. A.	AF
2,507,451	Flight Stabilizing Control Gyroscope	Molnar, J. P Carnvale, A.	Army
2,516,290	Low Altitude Bombing Attachment	Barth, T. H	Navy

Patent No.	Title of Invention	Inventor	Agency
2,516,500	Electrical Apparatus	Alford, A.	Army
2,516,902	Telescopic Gun for Aircraft Personnel Catapult and Other Uses.	Musser, C. W.	Army
2,517,511	Parachute Release Mechanism	Siri, W. E.	AF
2,521,680	Prone Position Aircraft Control	Amtmann, H. H.	AF
2,522,536	Mechanical Acceleration Integrator	Rabinow, J.	Navy
2,523,327	Remote-Control Mechanism	Rabinow, J.	Navy
2,523,481	Test Airfoil	Rabenhorst, D. W.	Navy
2,523,738	Tow Target Carrier	Trimbach, C. G.	AF
2,530,060	Radio Object Location Indicator	Holdam, J. V. Jones, L. M.	Army
2,530,418	Radio-Echo Detection Apparatus for Approaching Hostile Craft.	Alvarez, L. W.	Navy
2,532,549	Aircraft Radar-Map Roll Correction System.	Higinbotham, W. A Pepinsky, R.	Army
2,532,656	Hydraulic Damper	Backus, W. M. Jarvis, C. W.	Navy
2,534,710	Buoy Supported Collapsible Radar Reflector.	Golian, S. E. Whitmar, R. M.	Navy
2,534,712	Apparatus for Measuring Airspeed	Gray, J. W.	Navy
2,534,716	Inflatable Radar Reflector Buoy	Hudspeth, E. L. Nash, J. P.	Navy
2,534,744	Bomb Shackle	Wardwell, G. W.	Navy
2,534,745	Bomb Shackle	Wardwell, G. W.	Navy
2,538,700	Synchronizing Relay	Mershon, C. L.	AF
2,542,825	Display Arrangement for Aircraft-Coordinating Systems.	Mesa, J. O.	Navy
2,551,972	Remote-Control System	Schaelchlin, W. Winchester, A. J. Ponstingl, J. C.	Navy
2,553,512	Gas Turbine Apparatus	Cotton, T. J.	Navy
2,555,101	Aircraft Control Systems	Alvarez, L. W. Johnston, L. H.	Army
2,557,900	Position Indicator for Use in Blind Flying of Towed Gliders.	Wallace, R. L. Ericson, H. L.	Navy
2,562,082	Cross-Wind Undercarriage	Brown, R. W.	Com
2,562,227	Flow Profile for Reduced Drag	Zobel, T. W.	AF
2,562,296	Antenna	Christensen, J. W. Moyer, R. C.	Army
2,569,676	Controlled Flight Equipment	Kenyon, T.	Navy
2,572,043	Blind Landing System	McElhannon, R. J.	Army
2,576,981	Twisted Wing Tip Fin for Airplanes	Vogt, R.	AF
2,580,453	Remote-Control System for Aircraft	Murray, P. R. Bright, D. C.	Army
2,581,416	Spring Shock and Vibration Isolator	Irby, J. W.	Army
2,585,604	Rotating Disk Icing Rate Meter	Vonnegut, B. Katz, R. E	AF
2,585,855	Radar Ground-Controlled Approach System for Aircraft.	Sherwin, C. W. Johnston, L. H.	Army
2,593,427	Counterpoise	Fill, J. V.	Army
2,595,239	Hydrospring Shock Absorber	Gay, H. P.	Army
2,597,582	Jet-Propelled Rotary Airfoil and Fuel Valve.	Gruss, G. A.	Army
2,598,001	Rocket Launcher	Kunz, G.	Navy
2,598,180	Hydraulic Servomotor System	Kenyon, T. W.	Navy
2,599,555	Aircraft Rocket Launcher	Hurt, P. F.	Navy
2,608,132	Rocket Launcher for Retro-Bombing Apparatus.	Lauritsen, C. C.	Navy
2,608,134	Aircraft Gun Port Opening and Closing Device Controlled by Gun Temperature.	Beachler, R. R. Oberholtzer, J .M.	AF
2,617,934	Antenna Housing	McMillan, E. B. Redheffer, R. M.	Army
2,619,912	Pneumatic Application for Gear Pumps.	Shames, A. A.	Navy
2,621,718	Pulse Jet Heater with Automatic Starting and Control System Therefor.	Krautter, W. F. Staiger, K. Kamm, W. I.	AF

SUBGROUP 37–31—Ship building

The following patents relate to establishments engaged in building all types of ships, barges, canal boats and lighters of five gross tons and over, whether propelled by sail or motor power or towed by other craft.

Patent No.	Title of Invention	Inventor	Agency
2,345,621	Withe for Masts, Flagpoles and the Like.	Mothershead, R. E.	Com
2,545,194	Adsorption Process for Removal of Carbon Dioxide from the Atmosphere of a Submarine.	Colburn, A. P.----- Dodge, B. F.	Navy
2,579,220	Apparatus for Indicating Ballast Changes Necessary to Maintain Submersed Submarines in Trim.	Vine, A. C.-------	Navy

SUBGROUP 37–32—Boat building

The following patents relate to establishments engaged in building all types of boats of less than five gross tons such as motorboats, sailboats, rowboats, lifeboats, and canoes.

Patent No.	Title of Invention	Inventor	Agency
2,069,276	Life Line Projectile----------	Ryan, M. J.-------	Treas
2,366,184	Production of Potable Water from Saline Solutions.	Dean, R. S.-------	Int
2,485,921	Explosive Operated Latch Mechanism.	Rockwell, G. O.----	Navy
2,516,934	Gas Generator----------	Weaver, E. R.-----	Com

SUBGROUP 37–42—Railroad and street cars

The following patents relate to establishments engaged in building railroad, street, and rapid-transit cars and car equipment.

Patent No.	Title of Invention	Inventor	Agency
2,057,234	Device for Metering Liquids--------	Gorman, E. A.-----	USDA
2,260,999	Method of Circulating Air in Refrigerator Cars.	Mann, C. W.------	USDA
2,346,931	Method and Apparatus for Controlling the Circulation of Air in Refrigerator Cars.	Mann, C. W.------	USDA

MAJOR GROUP 38—PROFESSIONAL, SCIENTIFIC, AND CONTROLLING INSTRUMENTS, DEVICES, AND SUPPLIES

The patents listed under this title relate generally to establishments engaged in manufacturing mechanical measuring, laboratory, and scientific instruments; optical instruments and lenses; surgical, medical, and dental instruments, equipment, and supplies; opthalmic goods; photographic equipment and supplies; personal safety devices; and watches and clocks. Instruments for indicating, measuring, and recording electrical quantities and characteristics are classified in Subgroup 36–13.

SUBGROUP 38–11—Laboratory, scientific, and engineering instruments (except surgical, medical, and dental)

The following patents relate to establishments engaged in manufacturing laboratory, scientific, and engineering instruments such as nautical, navigational, aeronautical, surveying, drafting, mathematical instruments, and instruments for laboratory work and scientific research (except microscopes and telescopes—Subgroup 38–31).

Surgical and medical instruments are classified in Subgroup 38–41, mechanical measuring and controlling instruments in Subgroup 38–21, and instruments for indicating, measuring, and recording electrical quantities and characteristics in Subgroup 36–13.

Patent No.	Title of Invention	Inventor	Agency
2,104,028	Aircraft Blind Landing Beam System.	Dunmore, F. W.	Com
2,119,530	Course Indicator for Blind Flying	Dunmore, F. W.	Com
2,120,241	Radio Guidance of Aircraft	Diamond, H. Dunmore, F. W.	Com
2,120,245	Course Indicator for the Double and Triple Modulation Directive Radio Beacons.	Dunmore, F. W.	Com
2,121,024	Radio Transmitting and Receiving System.	Diamond, H.	Com
2,127,954	Radio Beam and Receiving Device for Blind Landing of Aircraft.	Dunmore, F. W.	Com
2,128,169	Safety Indicator for Airplanes	Shanley, F. R.	Navy
2,128,923	Radio System for Azimuth Indication.	Dunmore, F. W.	Com
2,133,285	Radio System for Automatic Control of Aircraft, as During Landing.	Dunmore, F. W.	Com
2,137,241	Automatic Steering System	Dunmore, F. W.	Com
2,141,173	Geological Instrument	Cordova, F. J.	TVA
2,145,876	Radio Direction Finder	Hinman, W. S.	Com
2,146,724	Radio System for Collison Prevention.	Dunmore, F. W.	Com
2,155,442	Means for Sampling a Liquid	Parkhurst, D. L.	Com
2,157,122	Warning System for Indicating the Proximity of Aircraft.	Dunmore, F. W.	Com
2,176,886	Measuring Rainfall	Campbell, R. L.	TVA
2,179,499	Method of Blind Landing of Aircraft	Diamond, H.	Com
2,179,514	Surveying Instrument	Morris, P.	TVA
2,207,769	Telemetric System	White, J. E.	TVA
2,210,903	Temperature Measuring	Dunmore, F. W.	Com
2,221,872	Graphic Radial Triangulation	King, J. E. Elliott, J. W.	USDA
2,261,974	Electrolytic Resistors	Craig, D. N.	Com
2,263,971	Stereoscopic Plotter	King, J. E. Elliott, J. W. Kail, P. B.	UDSA
2,266,038	Radio Direction Finder	Hinman, W. S.	Com
2,273,850	Specific Gravity Recording System	Ewald, P.	TVA
2,277,692	Measuring Cloud Height and Thickness.	Dunmore, F. W.	Com
2,283,919	Art of Radiometeorography	Diamond, H. Hinman, W. S.	Com
2,287,786	Automatic Weather Station	Diamond, H. Hinman, W. S.	Com
2,295,570	Humidity Measuring	Dunmore, F. W.	Com
2,322,229	Pressure Switching	Diamond, H. Hinman, W. S.	Com
2,322,770	Process Useful in Blind Flight Training.	Ocker, W. C.	Army
2,323,317	Altitude Measuring	Dunmore, F. W. Lapham, E. G.	Com
2,333,134	Principal Point Selector	Whitlock, H. W.	USDA
2,348,730	Visual Type Radio Beacon	Dunmore, F. W. Kear, F. G.	Com
2,351,769	Plotting Instrument	Kramer, A. J.	USDA
2,352,906	Spring Balance	Lyons, W. J.	USDA
2,380,103	Plotting Instrument	Flynn, T. P. Kramer, A. J.	USDA
2,389,692	Remote Indicating System	Sherwin, C. W.	Army
2,390,844	Quadrantal Corrector for Magnetic Compasses.	McNish, A. G.	Army
2,391,480	Laboratory Hammer Mill	Mullins, J. F. Hardesty, J. O. Ross, W. H. Shipley, E. S.	USDA
2,406,730	Vibrator	Whitehead, R. H.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,411,157	Means for Collecting Gas Analysis Samples.	Fene, W. J. Freas, G. L.	Int
2,422,179	Dust Storm Resistance Testing Chamber.	Brewster, L. A.	Army
2,422,921	Adjustable Capillary Leak	Inghram, M. G. Mier, A. O. Ney, E. P.	AEC
2,423,173	Safety Pipette	Glendenin, L. E. Brady, E. L.	AEC
2,426,192	Computer	Ferguson, J. D.	Navy
2,434,263	Determining Upper Air Wind Conditions by Radio Direction Finding.	Diamond, H. Dunmore, F. W. Hinman, W. S.	Com
2,436,386	Calculator	Gossard, W. D.	Army
2,440,693	Method for Determining the Subterranean Extension of Geologic Bodies.	Lee, F. W.	Int
2,441,042	Calibrating Means for Pitot Venturi Tubes.	Stoll, H. W.	AEC
2,442,599	Glass Magnetic Stopcock	Herrick, C. E. Liberatore, L. C.	AEC
2,442,622	Seal	Starr, A. M.	AEC
2,444,411	Variable Time Mechanism	Wellington, C. L.	Army
2,445,350	Multiple Effect Solar Still	Ginnings, D. C.	Com
2,445,517	Pendulum Controlled Electric Dive Angle Indicator.	Dilks, U. C.	Navy
2,445,712	Auditory Tone Signal Indications	Forbes, T. W.	Navy
2,459,726	Computing Linkage	Svoboda, A.	Navy
2,463,527	Measuring Potential Gradients in Space.	Dunmore, F. W.	Com
2,465,437	High-G Centrifuge	Engelhardt, G. B.	Army
2,469,387	Conversion Unit for Fire Finders	Heckman, W.	Int
2,470,139	Camera Shutter	Campbell, A. W.	Army
2,472,138	Plotter Computer for Determining Shellfire Position.	Yamins, H. G. Dunn, R. L.	Army
2,476,249	Remote Control Manipulator	Payne, J. H.	AEC
2,477,021	Stratospheric Reproducing Cabinet	Vingoe, R.	Army
2,478,237	Optical Projection and Plotting Table Device for Navigation Data.	Carson, R. H.	Army
2,478,303	Power Supply Circuit Means	Mullin, C. J.	Army
2,479,195	Communication System	Alvarez, L. W.	Army
2,479,567	Radio Position Determining System	Hallman, L. B.	Army
2,479,600	Ionization Chamber	Borkowski, C. J.	AEC
2,480,867	Aircraft Instrument	Maris, H. B.	Navy
2,485,470	Method and Apparatus for Control of Beam Energy.	Baker, C. P.	AEC
2,485,516	Shallow Plane Proportional Counter	Thompson, R. W.	AEC
2,485,953	Aircraft Control System	Barth, T. H.	Navy
2,486,779	Stall Warning Indicators	Fairbanks, A. J.	Com
2,487,814	Mapping Instrument	Landen, D.	Int
2,489,257	Control System and Landing Gear for Airborne Components.	Bean, H. S. Morey, F. C.	Navy
2,489,337	Aerial Reflecting Signal Target	Sperling, J. G.	Army
2,490,298	Radiation Detecting Apparatus	Ghiorso, A. Gordon, C. M.	AEC
2,494,541	Vacuum Drier with Automatic Capping Device.	Burr, H. K. Makower, B.	USDA
2,495,650	Coincidence Proportional Counter	Blair, J. M. Hush, J. M.	AEC
2,497,823	Radiation Measuring Device for Air Filters.	Molloy, E. W.	AEC
2,498,660	Collapsible Multi-Corner Reflector for Ultra High-Frequency Radiant Energy.	Dunmore, F. W. Lyons, H.	Com
2,498,841	Ion Source	King, L. D.	AEC
2,499,288	Vacuum Analyzer	Backus, J. G.	AEC
2,499,839	High-Speed Mercury Diffusion Pump	Stoltenberg, G. R.	AEC
2,500,169	Battery Filler Device Having a Puncturing Element for Piercing an Evacuated Battery Enclosing Can.	Ellis, G. B.	Army
2,500,186	Meteorological Telemetering System	Kline, M.	Army

Patent No.	Title of Invention	Inventor	Agency
2,500,492	Apparatus for Handling Materials	Henriques, F. C	AEC
2,504,530	Vacuum Leak Detector Method	Jacobs, R. B	AEC
2,504,585	Cyclotron Target	Reid, A. F	AEC
2,505,919	Proportional Counter	Simpson, J. A	AEC
2,506,419	Method and Apparatus for Detecting Ionizing Particles.	Graves, E. R	AEC
2,506,431	Pressure Measuring Device	Perret, W. R Davis, T.	AEC
2,506,435	Radiation Measurement	Rossi, B. B Allen, J. S.	AEC
2,507,321	Leak Testing Device	Sherwood, D. W	AEC
2,507,451	Flight Stabilizing Control Gyroscope	Molnar, J. P Carnvale, A.	Army
2,507,459	Antiblurring Device for Aerial Cameras.	Sandvik, O Chandler, J. S.	AF
2,509,215	Radiosonde	Craig, L. S Hillman, L	Army
2,509,669	Mechanical Coupling	Borst, L. B	AEC
2,509,700	Radioactivity Measuring Device	Simpson, J. A	AEC
2,509,943	Marker Flare	Silvey, G. A	Navy
2,510,059	Platform	Black, E. A	Army
2,513,805	Detecting Device	Kanne, W. R	AEC
2,514,135	Radiation Detector	Neil, H. G	AEC
2,514,290	Aperiodic Stabilizer for Instruments on Ships.	Panofsky, W. K	Navy
2,514,909	Carrier for Radioactive Slugs	Strickland, G	AEC
2,517,469	Method and Apparatus for Measuring Alpha Particle Radiation.	Dodson, R. W Beamer, W. H.	AEC
2,519,007	Radiation Counter	Wilson, V. C	AEC
2,519,807	Ionization Pressure Gauge	Yeater, M. L	Army
2,520,665	Gyroscope Control Device for Bombs	Warren, B. E	AF
2,521,133	Secondary Electron Multiplier	Snell, A. H Leonard C. M.	AEC
2,521,656	Ionization Chamber	Segre, E. G Chamberlain, O	AEC
2,521,881	Audio-Frequency Recorder	Suomi, V. E	Army
2,521,891	Valve	Beams, J. W	AEC
2,521,915	Calculator	Hartig, H. E	Navy
2,521,917	Micrometer	Holliday, C Hamilton, A. A.	Navy
2,523,738	Tow Target Carrier	Trimbach, C. G	AF
2,524,379	Neutron Velocity Selector	Fermi, E	AEC
2,524,987	Display Arrangement for an Aircraft-Coordinating System.	Mesa, J. O	Navy
2,525,108	Erector Magnet Cutout	Wolfert, E. R	Navy
2,528,575	Altitude Responsive Control Device	Broadbent, J. H	Navy
2,530,428	Electrical Indicator Plotting Board for Loran Navigation.	Gray, J. W	Navy
2,531,065	Apparatus for Changing the Ion Source of a Cyclotron.	Livingood, J. J Peters, J. V. Streeter, R. A.	AEC
2,531,106	Pocket Radiation Alarm	Brown, R. J Weiss, H. G.	AEC
2,531,144	Coincidence Proportional Counter	Manley, J. H	AEC
2,531,830	Voltage Pulse Generator	Simpson, A. R	AEC
2,531,953	Apparatus for Handling Radioactive Solutions.	Smith, W. Q Struthers, G. W.	AEC
2,532,307	Signal Responsive System	Hess, G. C	Army
2,532,503	Electronic Counting Circuits	Kennedy, J. W Baker, W. R. Wiegand, C. E.	AEC
2,532,874	Detection Apparatus	Anderson, H. L	AEC
2,532,956	Air Proportional Counter	Simpson, J. A	AEC
2,533,029	Odograph	McNish, A. G Tuckerman, B.	Army
2,533,102	Container for Radioactive Samples	Gifford, J. F	AEC
2,533,149	Precipitation Process and Apparatus Therefor.	Stang, L. G	AEC
2,533,701	Collimating Shield	Watt, R. D Watson, W. N.	AEC

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Patent No.	Title of Invention	Inventor	Agency
2,535,053	Portable Radio Compass	Ercolino, M. D.	Army
2,536,101	Plastic Strain Gauge	Shoub, H.	Navy
2,537,088	Sensitive Instrument Bearing	Raspet, R.	Int
2,537,775	Ion Vacuum Gauge	MacNeille, S. M.	AEC
2,538,158	Magnetic Deflection Gauge	Long, J.	Navy
2,538,632	Combination Beta and Gamma Chamber.	Tompkins, E. R.	AEC
2,539,065	Friction Clutch and Brake Mechanism.	Erwood, J. Beck, C.	Navy
2,539,578	Bearing Test Apparatus	Headley, L. M.	AEC
2,540,944	Sampling Apparatus	Handforth, S. L.	AEC
2,541,437	Apparatus for Investigating Optical Refraction Phenomena in Gaseous Media.	Prescott, R.	Navy
2,542,031	Fermentor for Submerged Cultures	Humfeld, H. Aeschlimann, E. Hoffman, J. R.	USDA
2,543,732	Momentum Gauge Piston Stop	Shultz, W. S.	Navy
2,544,285	Electrolytic Cell	Stuart, K. E. Osborne, S. G.	AEC
2,544,863	Computing Linkage	Svoboda, A.	Navy
2,546,700	Multiple Chisel Structure for Disintegrating and Removing Incrustations from Interior Walls of Receptacles.	Prescott, C. H.	AEC
2,546,888	Map Making Apparatus	Duffin, R. J.	Army
2,547,409	Guiding Means for Movement of Solid Materials.	Prescott, C. H.	AEC
2,550,445	Electrolytic Cell with Welded Anode Assembly.	Benning, A. F. McHarness, R. C. Richards, M. K. Feldman G. W.	AEC
2,551,542	Fluorophotometer	Marsh, C. R. Pickle, C. B.	AEC
2,551,652	Machine for Inserting a Glass Tube into a Stopper.	Vreeland, W. R.	Int
2,553,600	Dividing Machine	Mattare, M. A.	Int
2,554,649	Separation of Radium from Barium	Tomkins, E. R.	AEC
2,556,167	Crystal Analysis Apparatus	Coleman, J. E.	Army
2,557,108	Signaling Mirror	Hunter, R. S.	Com
2,557,761	Flux Phase Indicator	Powell, W. M.	AEC
2,558,425	Equation Solver	Droz, M. E.	Navy
2,558,805	Pressure Measuring	Yaglow, C. P.	Army
2,561,386	Steroblique Plotter	Lewis, J. G. Buckmaster, J. L.	Int
2,561,414	Apparatus for Gas Analysis	Potts, J. E.	TVA
2,562,153	Vacuum Distillation	Taylor, T. I.	AEC
2,562,664	Hyperbolic Position-Plotting Instrument.	Goudsmit, S. A.	Navy
2,566,247	Plotter	Pierce, F. Brettell, G. A.	Navy
2,567,682	Carbon Pile Gyro Pick-Off	Silberstein, G. P.	Navy
2,569,676	Controlled Flight Equipment	Kenyon T.	Navy
2,579,231	Electromagnetically Operated Counter	Goldberg, H. D. Goldberg, M. I.	AEC
2,581,138	Torpedo Director	Pitman, R. W.	Navy
2,582,374	Map Making Apparatus	Dalke, J. L.	Army
2,585,604	Rotating Disk Icing Rate Meter	Vonnegut, B. Katz, R. E.	AF
2,588,789	Neutron Detector	Zinn, W. H.	AEC
2,590,057	Half-Life Determining Method	Wiegand, C. E.	AEC
2,590,826	Oscillator Controlled Relay Circuits	Schenck, R. T.	AEC
2,590,925	Proportional Counter	Borkowski, C. J. Fairstein, E.	AEC
2,591,247	Coincidence Amplifier	Farnsworth, H. D.	AEC
2,591,998	Leak Detector	Baker, W. R.	AEC
2,592,416	Indicating Devices for Radioactivity Intensity.	Groth, E. J.	AEC
2,593,948	Distributed Coincidence Circuit	Wiegand, C. E. Chamberlain, O.	AEC

Patent No.	Title of Invention	Inventor	Agency
2,594,358	System and Apparatus for Selective Photographing.	Shaw, R. R.	USDA
2,597,535	Radioactive Assay Apparatus	Segre, E. G.	AEC
2,597,989	Mechanical Attachment for Azimuth Offset Bombing.	Havens, B. L.	Navy
2,600,209	Electrical Navigation Apparatus	Cole, A. D.	Army
2,604,514	Ionization Guage Regulation	Neil, H. G.	AEC
2,604,598	Ionization Chamber for Neutron Flux Measurements.	Armistead, F. C. Mead, L. W.	AEC
2,604,704	Hyperbolic Position-Plotting Instrument.	Woodward, W. R.	Navy
2,605,047	Latitude-Longitude Counter	Nyyssonen, E. Hughes, A. C.	Navy
2,605,332	Electronic Analyzer	Parson, J. H.	AEC
2,605,341	Directional Indicator System	Vacquier, V. V. Adkins, J. N.	Navy
2,605,344	Magnetometer Head	Brattain, W. H. Klein, N. E. Richardson, M. S.	Navy
2,605,429	Portable Radiation Survey Instrument.	Herndon, H. V. Hoff, R. G.	AEC
2,605,633	Insulator Testing Apparatus	Gow, J. D.	AEC
2,605,637	Surveying of Subsurface Water Tables.	Rhoades, E. D.	Int
2,605,856	Deaerating System for Water or Steam Condensate.	Kirkpatrick, A. McMeen, H. H.	AEC
2,606,291	Method and Apparatus for Material Separation.	Wilson, R. R.	AEC
2,606,296	Radiation Counter	Simpson, J. A.	AEC
2,606,573	Adjustable Venturi Assembly	Brobeck, W. M. Dorward, J. G.	AEC
2,608,200	Oxygen Demand Regulator, Including Altitude Compensator.	Stockman, R. E.	AF
2,608,530	Electrodeposition of Metal Salts	Kahn, M.	AEC
2,608,661	Means for Measuring Radiation	Zinn, W. H.	AEC
2,608,855	Method and Apparatus for Measuring Tightness of Vessels.	Jacobs, R. B.	AEC
2,609,500	Injector Mechanism	Martin, M. D.	AEC
2,611,103	Standing Wave Ratio Indicator	Hollenberg, A. V.	Army
2,612,776	Probe Supporting Apparatus for Wind Tunnels.	Klas, H. W.	AF
2,613,327	Dosimeter	Beckman, A. O. Herd, H. H. Robinson, A. D.	AEC
2,613,531	Diffusion Measuring Meter	Bacon, C. G.	AEC
2,614,645	Apparatus for Chemical Reaction Detection.	Wilhelm, H. A.	AEC
2,615,063	Current Measuring Device	Brown, C. J.	AEC
2,615,129	Synchro-Cyclotron	McMillan, E. M.	AEC
2,615,135	Mass Analyzing Apparatus	Glenn, W. E.	AEC
2,616,042	Stabilizer Arrangement for Cyclotrons and the Like.	Weeks, R. R.	AEC
2,616,052	Fast Neutron Dosimeter	Hurst, G. S.	AEC
2,616,053	Method and Apparatus for Measuring Beam Current.	Holloway, M. G.	AEC
2,617,042	Coincidence Circuit	Wouters, L. F.	AEC
2,617,294	Traction Dynamometer	Sanders, L. C.	Army
2,617,946	Radiation Detector Circuit	Weller, B. L.	AEC
2,619,107	Fluid Flow Control System	Graham, C. B.	AEC
2,619,552	Automatic Drift Corrector	Kerns, Q. A.	AEC
2,619,609	Adjustable Electrode Support	Reid, J. D.	AEC
2,620,446	Radiation Detection and Measuring Means.	Le Vine, H. D. Di Giovanni, H. J.	AEC
2,621,234	Instrument for Measuring the Carbon Content of Steel.	Buehl, R. C.	Int
2,621,296	Ion Source	Thompson, R. W.	AEC
2,622,208	Radioactive Particle Counting	Bernstein, W. Ballentine, R.	AEC
2,624,009	Ion Source	Wilson, R. R.	AEC

SUBGROUP 38–21—Mechanical measuring and controlling instruments

The following patents relate to establishments engaged in manufacturing mechanical instruments for indicating, recording, measuring, and controlling temperature, pressure, mechanical motion, rotation, flow, liquid level, humidity, density, acidity, alkalinity, and combustion; dial pressure gauges; physical-property testing apparatus such as hardness, tension, compression, torsion, ductility, and elasticity testing apparatus; and instruments for household and office use such as thermometers, barometers, and rain gauges. Instruments for indicating, measuring, and recording electrical quantities and characteristics are classified in Subgroup 36–13.

Patent No.	Title of Invention	Inventor	Agency
2,042,457	Stretch and Compression Testing Device.	Conn, W. T.	Com
2,051,740	Gauge for Measurement of Gas Pressures.	Palkin, S.	USDA
2,057,234	Device for Metering Liquids	Gorman, E. A.	USDA
2,066,311	Machine for Testing Fabrics	Schiefer, H. F. Appel, W. D.	Com
2,091,995	Hardness Testing Device	Knoop, F.	Com
2,095,237	Continuous Ventilating Psychrometer	Brooks, D. V. Allen, H. H.	Com
2,144,306	Cotton Condenser Sampling Device	Gaus, G. E.	USDA
2,155,442	Means for Sampling a Liquid	Parkhurst, D. L.	Com
2,156,893	Cotton Sampler Apparatus	Gaus, G. E. Franks, G. N.	USDA
2,156,894	Cotton Sampler for Cotton Condensers.	Gaus, G. E. Stedrousky, V. L.	USDA
2,166,811	Cotton Sample Selecting Device	Gaus, G. E.	USDA
2,173,071	Machine for Sampling Cotton	Gaus, G. E. McWhirter, R. G.	USDA
2,180,354	Water Surveying Apparatus	Frazier, A. H.	Int
2,182,706	Airplane Safety Device	Shanley, F. R.	Navy
2,209,020	Maturity Testing Device	Billman, L. M. DeGroot, A. E.	USDA
2,210,903	Temperature Measuring	Dunmore, F. W.	Com
2,233,403	Method for Indicating the Wear on Bearings and Other Surfaces.	Dickinson, H. C. McKee, S. A.	Com
2,261,802	Apparatus for Measuring the Coarseness of Powders.	Gooden, E. L.	USDA
2,268,677	Means for Testing the Resistance of Fabrics to Snagging.	Shearer, H. E. Schenke, E. M.	Com
2,278,219	Airplane Safety Device	Shanley, F. R.	Navy
2,283,954	Apparatus for Testing the Embrittlement Cracking Characteristics of Solutions.	Schroeder, W. C. Berk, A. A.	Int
2,283,955	Means for and Method of Testing Embrittlement Cracking Characteristic of Solutions.	Schroeder, W. C.	Int
2,285,421	Humidity Variable Resistance	Dunmore, F. W.	Com
2,286,286	Machine for Testing Metallic Cartridge Belt Links.	Laystrom, H. A. Persson, P. O.	Army
2,294,655	Apparatus for Sampling Liquid	Einstein, H. A.	USDA
2,295,570	Humidity Measuring	Dunmore, F. W.	Com
2,300,194	Apparatus for Sampling Liquids	Anderson, A. G.	USDA
2.316,537	Overfall Sampling Device	Hendrickson, B. H.	USDA
2,318,646	Telemetric System	White, J. E.	TVA
2,321,038	Gas Measuring Instrument	Morey, F. C.	Com
2,323,925	Hardness Testing Tool	Markwardt, L. J.	USDA
2,344,943	Adjustable Resistor for Flowmeters	Gooden, E. L.	USDA
2,351,769	Plotting Instrument	Kramer, A. J.	USDA
2,355,052	Apparatus for Measuring Steam-Gas Ratio.	Brown, E. H.	TVA
2,357,856	Hardness Testing Apparatus	Tate, D. R.	Com
2,358,856	Forage Acre Factor Calculator	Gable, G. H.	USDA
2,362,484	Pressure Gauge	Hickman, C. N.	Army
2,362,500	Apparatus for Testing Flame Safety Lamps.	Quenon, E. E.	Int
2,365,496	Moisture-Measuring Instrument	Shaw, C. S.	USDA

Patent No.	Title of Invention	Inventor	Agency
2,378,484	Wool Sampler	Johnston, A. LeCompte, G. C.	USDA
2,379,459	Temperature Indicator	Schreiber, R. P. Lee, W. M.	Army
2,384,476	Antivibration or Shock Absorber Mount.	Lane, D. L.	Army
2,390,844	Quadrantal Corrector for Magnetic Compasses.	McNish, A. G.	Army
2,395,252	Impact Operated Release Mechanism.	Carpenter, T. H.	Navy
2,396,700	Spring Loading Machine	Holcomb, N. P.	Army
2,398,458	Impact Testing Device	Zavarella, A. McPheters, L. L.	Army
2,400,111	Pentareflector	Gardner, I. C.	Army
2,401,053	Measurement of Surface Tension	Cupples, H. L.	USDA
2,402,688	Meteorological Telemetering System.	Skurnick, S.	Army
2,402,926	Method of Quantitatively Evaluating Roughness of Metals.	Herschman, H. K.	Com
2,404,889	Collocating Gauge	Ringie, D. F.	Navy
2,405,447	Feed Structure for Cartridge Belt Links.	Persson, P. O. Spohr, C. W.	Army
2,405,614	Moistureproofing Device	Shriro, M. A.	Army
2,417,392	Torsion Balance	Craig, R. Boyer, R. Q.	AEC
2,418,463	Crystal Analysis Apparatus	Coleman, J. E.	Army
2,420,339	Course-Recording Camera	Rabinow, J.	Army
2,422,179	Dust Storm Resistance Testing Chamber.	Brewster, L. A.	Army
2,422,921	Adjustable Capillary Leak	Inghram, M. G. Mier, A. O. Ney, E. P.	AEC
2,426,958	Electrode Holder for Use in Electroencephalography.	Ulett, G. A. Claussen, F. B.	Army
2,435,181	Breathing Indicator	Lindsay, H. W.	AF
2,435,608	Drill Sampling Device for Fish Liver.	Sanford, F. B. McKee, L. G.	Int
2,436,083	Sedimentation Tube	Williams, J. W. Bevilacqua, E. M.	AEC
2,436,145	Nephelometer for Assaying Penicillin.	Johnson, F. H.	Army
2,441,044	Switching and Timing Unit for Pneumatic Relays.	Tate, K. L.	AEC
2,441,133	Automatic Weather Data Transmitting Station Unit.	Brady, J. M.	Army
2,441,562	Continuous Reading Thermocouple Temperature Measuring Device for Rotary Vessels.	Chase, L. R. Dimick, R. H.	Int
2,443,603	Analysis of Electrical Transients	Crost, M. E.	Army
2,444,613	Low Humidity Meter	McCombie, H. R. Wilder, C. D.	AEC
2,445,304	Visual Vibrating Reed Stroboscope	Grace, W. J.	Navy
2,445,307	Force Gauge	Mindlin, R. D.	Navy
2,445,517	Pendulum Controlled Electric Dive Angle Indicator.	Dilks, U. C.	Navy
2,446,195	Tester for Electrical Shieldings	Shive, S. L.	Army
2,446,385	Adjusting Arrangement for Pneumatic Relays of the Force-Balance Type.	Newell, F. B.	AEC
2,446,537	Thrust Gauge	Hickman, C. N.	Army
2,447,000	Play-Minimizing Means for Adjustable Gauging Members.	Darmody, W. J.	Army
2,448,203	Powder Tester	Africano, A.	Army
2,448,533	Consistency Meter	Laurence, H. W.	Int
2,450,872	Condenser Tester	Aiken, E. W.	Army
2,451,856	Mechanical Device for Determining the Future Position of Aircraft.	Miller, E. E.	Army
2,452,614	Electrical Test Circuit	Teetsell, R. J.	Army
2,453,160	Field Intensity Meter	Ringer, A.	Army
2,454,574	Flow Regulator	Shoemaker, D. P.	Navy
2,455,345	Capacitive Angular Velocity Measuring Device.	Watt, B. E.	Navy
2,457,788	Film Extensibility Testing Method and Apparatus.	Van Den Akker, J. A.	Army
2,458,033	Microphonics Tester	Sterner, J. E.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,458,953	Apparatus and Method for Determining the Scuff Resistance of Leather.	Mann, C. W.	USDA
2,460,290	Cartridge Extractor Testing Machine.	Holcomb, N. P.	Army
2,464,179	Smokeless Powder Tester	Hickman, C. N. Dempster, A. J.	Navy
2,472,108	Thrust Gauge for Projectiles	Hickman, C. N.	Army
2,472,366	Thermal Time Delay	Brode, R. B.	Navy
2,472,380	Screen for Optical Displacement Gauges.	Long, J. H.	Navy
2,475,138	Device for Measuring Thermal Conductivity.	Hood, C. B. Jones, W. Johnston, H. L.	AEC
2,476,297	Shock Testing Device	Harris, E. R.	Army
2,477,507	Electrical Pressure Gauge	Africano, A.	Navy
2,477,527	Harmonic Computing Mechanism	Pierce, F.	Navy
2,478,659	Apparatus for Erosion Testing	Jackson, L. R. Ramaley, E. J.	Army
2,479,808	Electromagnetic Apparatus for Measuring Projectile Velocity During Penetration.	Beth, R. A.	Army
2,485,847	Combination Magnetometer and Gradiometer.	Schmitt, O. H.	Navy
2,485,888	Electronic Tachometer and Stroboscope.	Jordan, J. D.	Navy
2,485,921	Explosive Operated Latch Mechanism.	Rockwell, G. O.	Navy
2,485,924	Tester for Electronic Discharge Devices.	Sanders, E. R.	Navy
2,485,977	Stress Measuring Device	Mains, R. M.	Navy
2,486,207	Liquid Level Measuring Apparatus	Richards, M. K.	AEC
2,486,432	Conductivity Cell for Viscous Materials.	Otto, E. M.	Com
2,486,976	Pressure Measuring Device	Perret, W. R.	AEC
2,487,077	Colorimetric Gas Detection	Shepherd, G. M.	Com
2,487,748	Air Thermograph	Wyman, J. Barnes, D. F.	Navy
2,487,814	Mapping Instrument	Landen, D.	Int
2,488,486	Bottom Sampler	Worzel, J. L.	Navy
2,496,298	Shock Testing Apparatus	Mackas, G.	Army
2,496,310	Reversing Acceleration Integrator	Rabinow, J.	AF
2,496,420	Apparatus for Dynamic Compression Testing.	Stern, O.	Army
2,498,026	Mercury Switch Tester	Brown, C. F.	Navy
2,498,045	Deceleration Apparatus	Looney, C. T. Howell, L. G. Johnston, B. G.	Navy
2,500,186	Meteorological Telemetering System	Kline, M.	Army
2,507,321	Leak Testing Device	Sherwood, D. W.	AEC
2,508,584	Differential Bellows Control Device	Steigerwalt, O. I.	Army
2,509,905	Porosity Tester	Burris, A.	Navy
2,514,284	Photo Electric Measuring Device	LePage, W. R.	Navy
2,515,034	Bathythermograph	Ewing, W. M. Vine, A. C.	Navy
2,515,069	Wind Tunnel	Zola, C.	Navy
2,517,204	Vibration Test Unit for Tube Couplings.	Hartley, E. C.	AF
2,517,545	Apparatus for Testing Balls	Cushman, W. W. Koren, S.	Army
2,518,217	Apparatus for Testing Tensile Characteristics of a Material.	Beck, C. K. Kirkpatrick, D.	AEC
2,519,323	Method of Measuring Corrosion and Erosion.	Creutz, E. C. Shank, W. B. Gurinsky, D. H.	AEC
2,520,297	Tiltometer System	Anderson, W. C.	Navy
2,521,634	Acoustic Chamber for Analysis of Gaseous Mixtures.	Janssen, W. H. Mikelson, W.	AEC
2,521,918	Decelerometer	Lindvall, F. C. Hudson, D. E.	Navy
2,522,536	Mechanical Acceleration Integrator	Rabinow, J.	Navy
2,523,327	Remote-Control Mechanism	Rabinow, J.	Navy

Patent No.	Title of Invention	Inventor	Agency
2,523,464	Electric Thrust Gauge	Golden, S. Comley, E. A. Alexander, N. E.	Navy
2,523,474	Apparatus for Measuring Transverse Accelerations.	Mason, H. A.	Navy
2,523,481	Test Airfoil	Rabenhorst, D. W.	Navy
2,525,197	Thermal Flowmeter	Hoxton, L. G. Beams, J. W. Snoddy, L. B.	AEC
2,526,636	Moisture Measuring Instrument	Colman, E. A.	USDA
2,526,825	Fluid Selecting Apparatus	Nier, A. O. Goertzel, G. H. Thorness, R. B.	AEC
2,528,826	Recording Equipment Having an Adjustable Advance Ball.	Hanson, R. O. Saars, W. F.	Navy
2,530,111	Method and Means for Indicating Ionization Pressure.	Yeater, M. L.	Army
2,531,833	Tachometer	Straus, H. A.	AEC
2,532,257	Corrosion Testing Apparatus	Kirshenbaum, I. McCaulay, D. A.	AEC
2,532,539	Testing Device for Radio Object Detection Systems.	Halpern, J. Counter, V. A. Fairbank, W. M.	Army
2,532,620	Linear Time Axis Pressure Recorder	Higgs, P. M.	Navy
2,533,491	Valve Control Mechanism	Abbott, T. A. McMahon, J. B.	AEC
2,535,053	Portable Radio Compass	Ercolino, M. D.	Army
2,537,088	Sensitive Instrument Bearing	Raspet, R.	Int
2,537,775	Ion Vacuum Gauge	MacNeille, S. M.	AEC
2,539,618	Vibration Responsive Apparatus	Good, W. A. Wenrich, L. W.	Navy
2,542,905	Apparatus for Measuring Pressure	Cromer, S. Booth, E. T. Alexander, F. L.	AEC
2,543,422	Control Device	Putman, H. V. Leonard, M. G. Grafinger, L. N. Guidosh, J. A.	Navy
2,543,732	Momentum Gauge Piston Stop	Schultz, W. S.	Navy
2,554,792	Pressure Measuring Device	Perret, W. R.	AEC
2,556,558	Tourmaline Crystal Elements for Pressure Gauges.	Silverman, D.	Army
2,559,564	Pneumatic and Air Sweep Closure	Sperling, C. C.	AEC
2,559,571	Thermocouple Thermometer	Shedlovsky, T.	Navy
2,560,537	Defrosting Indicator	Andersen, A. A.	USDA
2,563,626	Ion Source	Bashkin, S. Stein, F. S. Binns, J. E. Rice, C. E.	AEC
2,563,729	Method and Apparatus for Control of Boundary between Electrolytic Fluids.	Longworth, L. G.	AEC
2,567,251	Analytical Selenium Strip and Method of Preparation Thereof.	Stitt, F.	USDA
2,567,519	Pressure Monitoring Device	Livingston, R.	AEC
2,568,713	Instrument for Use in Determining the Stress in an Electrodeposit.	Brenner, A.	Com
2,569,499	Wire-Resistance Gauge for Measuring Large Strains.	Shoub, H.	Navy
2,570,984	Ambient Pressure-Responsive Clamping Means.	Reyenga, A. J.	AEC
2,573,649	Gas Analyzer	Nier, A. O.	AEC
2,573,830	Impulse Testing Device	Boykin, R. O.	Navy
2,573,843	Pneumatic Gauging Device	Hendrix, D. O. Langer, R. M.	Navy
2,573,870	Manometric Gas Detector	Pfund, A. H.	Navy
2,574,600	Decelerometer	Stokes, R. R.	Navy
2,576,433	Rapid Load Testing Machine	Wood, D. S.	AF
2,579,220	Apparatus for Indicating Ballast Changes Necessary to Maintain Submersed Submarines in Trim.	Vine, A. C.	Navy
2,579,496	Switch Arrangement on Phonograph Pickup.	Huston, W. D. Brady, J. M.	Army
2,580,412	Nondeforming Holding Means for Gauges.	Darmody, W. J.	Army
2,580,457	Measurement Apparatus	Norris, S. E.	Int

Patent No.	Title of Invention	Inventor	Agency
2,582,304	Automatic Buoyancy Control System	Wolfe, R. C Boyle, T. C.	Navy
2,585,901	Method of Isotope Analysis	Dieke, G. H	AEC
2,586,984	Apparatus for Governing Fluid Flow	Nier, A. O Thorness, R. B. Stevens, C. M.	AEC
2,587,674	Bolometer	Aiken, C. B	AF
2,588,355	Method and Apparatus for Measuring Dew Point.	Burr, H. K Bailey, G. F.	USDA
2,592,585	Corn Milling Test	Rist, C. E MacMasters, M. M. Baird, P.	USDA
2,594,618	Thermal Flowmeter	Booth, E. T	AEC
2,594,668	Flowmeter	Mannal, C	AEC
2,597,039	Pressure Breathing Demand Oxygen Regulator.	Seeler, H	AF
2,597,891	Nestable Leg Caliper	Muller, V	Navy
2,599,578	Device for Measuring the Change of Strain in a Solid Medium.	Obert, L Duvall, W. I.	Int
2,599,922	Monitoring of Gas for Radioactivity	Kanne, W. R	AEC
2,601,272	Apparatus and Procedure for the Determination of Helium in Gasses.	Frost, E. M	Int
2,601,439	Fluid Pressure Regulator	Karig, H. E	Navy
2,601,678	Measuring Apparatus	Beatty, C. G	Navy
2,601,778	Free Piston Impulse Blast Gauge	Gordon, W. E	Army
03,083	Apparatus for Testing the Resistance of Materials to Abrasion.	Schiefer, H. F	Com
2,604,786	Static Pressure Investigator	Huzel, D. K	Army
2,606,573	Adjustable Venturi Assembly	Brobeck, W. M Dorward, J. G.	AEC
2,610,300	Flow Control	Walton, W. W Bowers, R. C.	AEC
2,610,506	Instrument for Locating the Liquid Level in Wells.	Taliaferro, D. V McClung, C. F. Mueller, F. G.	Int
2,612,776	Probe Supporting Apparatus for Wind Tunnels.	Klas, H. W	AF
2,612,779	Compensated Thermocouple	Mulford, S. F	AEC

SUBGROUP 38–31—Optical instruments and lenses

The following patents relate to establishments engaged in grinding optical lenses and prisms, and in manufacturing microscopes, telescopes, field and opera glasses, and related optical instruments and devices such as refractometers, spectrometers, spectroscopes, colorimeters, polariscopes, and optical measuring instruments. Sighting and fire-control instruments and bombsights are classified in Subgroup 19–41.

Patent No.	Title of Invention	Inventor	Agency
2,064,517	Photoelectric Cell Circuit	Brice, B. A	USDA
2,346,512	Electrode Holder for Spectrographic Analysis.	Scribner, B. F Corliss, C. H.	Com
2,393,883	Autocollimating Button	Broderson, N. O	Army
2,393,896	Autocollimating Button and Light Shield Therefor.	Freres, R. N	Army
2,400,111	Pentareflector	Gardner, I. C	Army
2,401,191	Telescopes for Receiving and Detecting Ultraviolet Light.	Rosett, W	Navy
2,402,688	Meteorological Telemetering System	Skurnick, S	Army
2,412,616	Signaling Mirror	Hunter, R. S	Com
2,417,392	Torsion Balance	Craig, R Boyer, R. Q.	AEC
2,424,976	System for Detecting Sources of Radiant Energy.	Goley, M. J Zahl, H. A.	Army
2,425,758	Photographic Apparatus for Recording Interference Phenomena.	Saunders, J. B	Com
2,434,890	Pupillometric Exposure Meter	Saunders, J. B	Com
2,435,074	Contrast Measuring Device	Fry, G. A	Army
2,437,608	Coaxial Optical System for Displacement Gauges.	Long, J. H Lupish, W.	Navy
2,440,957	Pupillometer	Kennedy, J. L Mead, L. C. Wellman, B.	Army
2,442,790	Method for Identifying Cross Wires in Optical Instrument Reticules by the Use of Polarized Light.	Warner, E. R	Int

Patent No.	Title of Invention	Inventor	Agency
2,444,457	Metal Lens Holder	Marks, G. W Cossey, F. Mills, R. S.	Int
2,445,594	Telecentric Projection Lens	Bennett, H. F	Navy
2,449,551	Telescope Mount	Garand, J. C	Army
2,456,426	Mass Spectrometer System	Ney, E. P Nier, A. O.	AEC
2,467,667	Four Component Lens System for Correcting Curvature of Fields.	Greenstein, J. L Henyey, L. G.	Navy
2,470,156	Contrast Measuring Apparatus having Relatively Rotatable Polarizing Elements for Optical Sighting Instruments.	Fry, G. A	Army
2,470,455	Automatic Altitude and Pressure Compensator for Aerial Camera Lenses.	Avila, C. F	AF
2,477,518	Interpupillary Distance Gauge having Mirror Means.	Kappauf, W. E Brogden, W. J.	Navy
2,478,237	Optical Projection and Plotting Table Device for Navigation Data.	Carson, R. H	Army
2,478,300	Radio Direction Indicator	Mizen, C. A	Army
2,480,199	Reflector	Rosenberg, P Garman, R. L.	Army
2,483,991	Radiation Exposure Meter	Wollan, E. O Pardue, L. A. Goldstein, N.	AEC
2,485,873	Process of Making Finished Circumferentially Surfaced Lenses from Lens Stock.	Flett, W. J	Navy
2,494,834	Mounted Specimen	Ringheim, R. S	AEC
2,497,070	Crystal Analysis Apparatus having a Removable Crystal Holder.	Coleman, J. E	Army
2,499,288	Vacuum Analyzer	Backus, J. G	AEC
2,500,186	Meteorological Telemetering System	Kline, M	Army
2,504,982	Signaling Mirror	Hunter, R. S	Com
2,506,944	Neutron Meter	Stauffer, L. H Snyder, T. M.	AEC
2,507,301	Apparatus for Controlling Magnetic Field.	Fulbright, H. W	AEC
2,509.394	Vacuum Tube Flux Meter	Kinslow, R	AEC
2,511,840	Self-Compensating Optical System for Telemeters.	Gardner, I. C	Army
2,512,257	Water-Resistant Compound Lens Transparent to Infra-Red.	Pfund, A. H	AF
2,514,290	Aperiodic Stabilizer for Instruments on Ships.	Panofsky, W. K	Navy
2,517,892	Device for Supporting Binoculars on Military Headgear.	Rawson, A. J Larrabee, M. G.	AF
2,526,825	Fluid Selecting Apparatus	Nier, A. O Goertzel, G. H. Thorness, R. B.	AEC
2,535,032	Radio-Frequency Mass Spectrometer	Bennett, W. H	Com
2,541,437	Apparatus for Investigating Optical Refraction Phenomena in Gaseous Media.	Prescott, R	Navy
2,549,830	Petrographic Slide Holder	Logan, M. H Criswell, A. O.	Int
2,551,544	Mass Spectrometer	Nier, A. O Inghram, M. G.	AEC
2,557,108	Signaling Mirror	Hunter, R. S	Com
2,569,564	Pneumatic and Air Sweep Closure	Sperling, C. C	AEC
2,563,626	Ion Source	Bashkin, S Stein, F. S. Binns, J. E. Rice, C. E.	AEC
2,566,026	Back Illumination Device for Translucent Indicators.	Hughes, A. C	Navy
2,572,600	Mass Spectrograph	Dempster, A	AEC
2,573,748	Acoustic Ranging System, Including Magnetic Recording.	Weinstein, D. H Keiser, M.	Army
2,578,768	Mirror Mounting for Optical Instruments and Fine Angular Adjustment Means Thereof.	Whitson, W. L	Army
2,579,225	Adjustable Support for Spectrometer Reflectors.	Fox, R. J Borst, L. B.	AEC
2,586,851	Diaphragm Optical Gas Mask	Monro, R Brown, I. C. Himkamp, C. H Parduhn, F. J	Army

Patent No.	Title of Invention	Inventor	Agency
2,589,883	Schmidt Type Optical Projection System for Indicating Devices.	Soller, J. T. Starr, M. A.	Navy
2,592,159	Tide Gauge	Klebba, A. A. Vine, A. C. Ewing, W. M.	Navy
2,594,310	Signaling Mirror	Hunter, R. S.	Com
2.594,970	Viewing Device for Radioactive Materials.	Monk, G. S.	AEC

SUBGROUP 38–41 Surgical and medical instruments.

The following patents relate to establishments engaged in manufacturing surgical, veterinary, orthopedic, and other medical instruments. Surgical and orthopedic appliances are classified in Subgroup 38–42, and electrotherapeutic, electromedical, and X-ray apparatus in Subgroup 36–93.

Patent No.	Title of Invention	Inventor	Agency
2,371,244	Oscillosphygmograph	Lax, H.	HEW
2,386,878	Apparatus for Determining Blood Volume.	Nickerson, J. L.	Army
2,410,499	Stimulator	Hinsey, J. C. Geohegan, W. A.	Army
2,426,958	Electrode Holder for Use in Electroencephalography.	Ulett, G. A. Claussen, F. B.	Army
2,435,820	Transfusion Equipment	Biggs, L. W.	Army
2,435,854	Apparatus for the Freezing-Drying of Tissues.	Taylor, A. C.	Army
2,437,329	Surgical Instrument for Curetting	Moore, F. J.	Army
2,440,957	Pupillometer	Kennedy, J. L. Mead, L. C. Wellman, B.	Army
2,477,518	Interpupillary Distance Gauge Having Mirror Means.	Kappauf, W. E. Brogden, W. J.	Navy
2,541,056	Screening Method for Blood Glucose	Heftmann, E.	HEW
2,611,368	German Silver Electrocardiograph Contact Electrode.	Pecora, L. J.	HEW

SUBGROUP 38–42—Surgical and orthopedic appliances and supplies; and personal safety devices, not elsewhere classified

The following patents relate to establishments engaged in manufacturing surgical and orthopedic appliances and supplies, including surgical gut strings; hospital and surgical sterilizers; artificial limbs; fracture appliances; elastic hosiery, arch supports, and other foot appliances; abdominal supporters, braces, and trusses; sanitary napkins; bandages; surgical gauze and dressings; adhesive tapes and medicated plasters; and personal safety appliances and supplies, not elsewhere classified.

Patent No.	Title of Invention	Inventor	Agency
2,069,276	Life Line Projectile	Ryan, M. J.	Treas
2,164,330	Fully Molded Gas Mask Facepiece	Katz, S. H. Burger, D. O.	Army
2,344,669	Dust Respirator	Young, P. E. Barker, M. E. Bruce, J. N.	Army
2,372,437	Filter Medium	Lathrop, E. C. Aronovsky, S. I.	USDA
2,377,865	Life Preserver	Coombs, R. E.	Navy
2,379,574	Method of Producing Surgical Bandages with Improved Elastic Properties.	Goldthwait, C. F.	USDA
2,387,376	Litter	Winer, E. Winer, A.	Army
2,393,005	Ear Protector	Veneklasen, P. S.	Army
2,393,340	Applicator for Ear Protectors	Russell, E. S.	Army
2,403,418	Earphone Socket	Volkmann, J.	Army
2,403,653	Shoulder Harness Take-Up and Inertia Lock.	Geohegan, W. A. Phipps, R. E.	AF
2,401,837	Method of Making Cotton Fabrics with Differential Elastic Properties.	Goldthwait, C. F.	USDA
2,408,490	Earphone Socket	Stevens, S. S.	Army
2,408,494	Earphone Socket	Veneklasen, P. S.	Army
2,416,939	Speech Transmitter for Masks	Morrow, C. T.	Army
2,423,355	Earphone Socket Structure	Veneklasen, P. S.	Army

Patent No.	Title of Invention	Inventor	Agency
2,423,475	Internal Surgical Dressing	Bice, C. W. MacMasters, M. M.	USDA
2,434,956	Liquid Oxygen "Walkaround" Unit	Prentiss, S. S.	AF
2,435,181	Breathing Indicator	Lindsay, H. W.	AF
2,435,820	Transfusion Equipment	Diggs, L. W.	Army
2,437,490	Ear Defender	Leonard, R. W. Gales, R. S. Watson, N. A. Veneklasen, P. S.	Navy
2,448,153	Process of Making Cotton Textiles Water-Absorbent and Rot-Resistant.	Reid, J. D. Daul, G. C.	USDA
2,450,101	Material for Use in the Manufacture of Ear Defenders and the Like.	Veneklasen, P. S.	Navy
2,451,703	Resilient Tantalum Tubes and a Process for Making Same.	Weiss, P. A.	Army
2,453,475	Resuscitation Apparatus	Tobias, C. A.	Navy
2,456,606	Inert Gas Eliminator for High Altitude Oxygen Apparatus.	Martin, D. S. Nachtrieb, N. D. Seegmiller, J. E.	Navy
2,458,884	Ear Protector Valve	Volkmann, J.	Army
2,465,040	Method and Apparatus for Controlling the Concentration of Vapors in the Atmosphere.	Robertson, O. H. Puck, T. T. Wise, H.	Army
2,466,127	Outlet Valve Diaphragm Assembly	Smith, D. P.	Army
2,473,922	Breathing Indicator	Tobias, C. A.	AF
2,476,249	Remote Control Manipulator	Payne, J. H.	AEC
2,477,526	Thermometric Instrument for Measuring Impregnite in Cloth.	Perley, G. A.	Navy
2,477,989	Safety Jacket	LaMaida, T.	Army
2,480,135	Handguard	Harvey, E. M.	Army
2,485,908	Diving Gear	Morrow, C. T.	Army
2,489,277	Flexible Acoustic Tube	Faralla, R. A.	Army
2,492,458	Fibrin Foam	Bering, E A.	Navy
2,507,450	Oxygen Generator with Integrated Initiating Device.	Milikan, G. A. Legallais, V. A.	AF
2,511,667	Chemical Method for Concentrating Isotopes of Carbon.	Calvin, M. Yankwich, P. E.	AEC
2,518,345	Chemical Composition	MacDonald, R. N.	Army
2,531,745	Squeeze-Bottle Atomizer for Acid Liquids.	Schopmeyer, C. S.	USDA
2,531,953	Apparatus for Handling Radioactive Solutions.	Smith, W. Q. Struthers, G. W.	AEC
2,533,102	Container for Radioactive Samples	Gifford, J. F.	AEC
2,534,710	Buoy Supported Collapsible Radar Reflector.	Golian, S. E. Whitmer, R. M.	Navy
2,534,716	Inflatable Radar Reflector Buoy	Hudspeth, E. L. Nash, J. P.	Navy
2,537,742	Stressed Pumping Cylinder Assembly for Liquid Oxygen.	Collins, S. G.	AF
2,545,194	Adsorption Process for Removal of Carbon Dioxide from the Atmosphere of a Submarine.	Colburn, A. P. Dodge, B. F.	Navy
2,545,452	Segmented Articulated Fingers	Fletcher, M. J.	Army
2,549,792	Control Device for Prosthetic Hands	Fletcher, M. J.	Army
2,573,731	Acid Metering and Atomizing Nozzle	Ryberg, M. E. Burney, H. W. Joy, F. L.	USDA
2,586,851	Diaphragm Optical Gas Mask	Monro, R. Brown, I. C. Himkamp, C. H. Parduhn, F. J.	Army
2,591,211	Adjustable Shoe	Spencer, B. D.	Army
2,597,011	Preparation of Starch Sponge	MacMasters, M.M. Hoagland, V. E.	USDA
2,597,039	Pressure Breathing Demand Oxygen Regulator.	Seeler, H.	AF
2,599,573	Method of Making Flexible Resinous Replicas.	Milton, C. L. Nielson, C. A.	Army
2,605,065	Net-Suit or Combined G-Suit, Parachute, Safety and Crash Harness.	Wilkins, R. W.	Navy
2,606,325	Age and Stain Resisting Article of Plasticized Polyvinyl Chloride.	Nielson, C. A. Leonard, F. Cort, I.	Army
2,608,200	Oxygen Demand Regulator, Including Altitude Compensator.	Stockman, R. E.	AF
2,617,411	Resuscitator Using Separate Air and Oxygen Sources.	Seeler, H.	AF

SUBGROUP 38–43—Dental equipment and supplies

The following patents relate to establishments engaged in manufacturing dental instruments, mechanical devices, and other equipment and supplies for use by dentists.

Patent No.	Title of Invention	Inventor	Agency
2,333,679	Process for Protecting Plastics During Curing or Molding.	Schoonover, I. C. Dickson, G. R.	Com
2,359,512	Elastic Impression Compositions	Dickson, G. R. Schoonover, I. C.	Com

SUBGROUP 38–61—Photographic equipment and supplies

The following patents relate to establishments engaged in manufacturing photographic apparatus, equipment, and supplies. Important products include apparatus such as still cameras, motion-picture cameras, projection apparatus, photocopy and microfilm machines; equipment such as plate and film holders, tripods, film reels, developing tanks and machines, enlargers, and motion-picture screens; supplies such as sensitized film, paper, and plates; and prepared developers, fixers, and toners. Photographic lenses are classified in Subgroup 38–31.

Patent No.	Title of Invention	Inventor	Agency
2,224,947	Film Processing Apparatus	Blaney, J. M.	Army
2,248,056	Film Processing System	Blaney, J. M.	Army
2,263,971	Stereoscopic Plotter	King, J. E. Elliott, J. W. Kail, P. B.	USDA
2,333,134	Principal Point Selector	Whitlock, H. W.	USDA
2,377,292	Photographic Process	Donaldson, P. H.	Army
2,401,288	Method of and Apparatus for Measuring Radiations.	Morgan, R. H. Hodges, P. C.	Army
2,401,289	Photoelectric Timer for Roentgen Photography.	Morgan, R. H. Hodges, P. C.	Army
2,418,523	Method and Apparatus for Producing Radiographs.	Neddermeyer, S. H. Kerst, D. W.	AEC
2,420,339	Course-Recording Camera	Rabinow, J.	Army
2,434,890	Pupillometric Exposure Meter	Saunders, J. B.	Com
2,458,882	Timing Device for High Speed Motion-Picture Cameras.	Stoner, R. G. Lampson, C. W.	Army
2,460,163	Projectile Flight Recording Multiple Exposure Camera.	Bowen, I. S.	Navy
2,470,139	Camera Shutter	Campbell, A. W.	Army
2,470,455	Automatic Altitude and Pressure Compensator for Aerial Camera Lenses.	Avila, C. F.	AF
2,483,991	Radiation Exposure Meter	Wollan, E. O. Pardue, L. A. Goldstein, N.	AEC
2,493,137	Voltage Doubling Circuits	Hensen, W. W.	AEC
2,498,579	Beam Blanking and Sweep Control	Roberts, G. A.	Army
2,507,459	Antiblurring Device for Aerial Cameras.	Sandvik, O. Chandler, J. S.	AF
2,512,256	Gunnery Training Device	O'Connor, A. L.	AF
2,512,257	Water-Resistant Compound Lens Transparent to Infrared.	Pfund, A. H.	AF
2,541,599	Radiography	Morrison, P.	AEC
2,549,699	Photographic Methods and Apparatus.	McLaughlin, D. B. Perkins, G. S.	Navy
2,584,401	Transparent Vacuum Back	Thralls, M. A.	Navy
2,594,358	System and Apparatus for Selective Photographing.	Shaw, R. R.	USDA
2,605,162	Film Opaquing Device and Process	Gantt. J. F.	Navy
2,605,923	Photographic Developing Tank	Spaulding, L. R.	Just

SUBGROUP 38–71—Watches, clocks, and parts

The following patent relates to establishments engaged in manufacturing clocks (including electric), watches, mechanisms for clockwork-operated devices, and clock and watch parts.

Patent No.	Title of Invention	Inventor	Agency
2,537,929	Timer	Daly, T. A. Gill, H. A.	Navy

MAJOR GROUP 39—MISCELLANEOUS PRODUCTS

The patents listed under this title relate generally to establishments engaged in manufacturing products not classified in any other major group. Included are jewelry, office and artists' materials, buttons, costume novelties, miscellaneous notions, fireworks and pyrotechnics, and brooms and brushes.

SUBGROUP 39–13—Lapidary work

The following patents relate to establishments engaged in all types of lapidary work, including cutting and polishing diamonds and other precious stones; drilling pearls, recutting and setting stones; and preparing jewels for instruments, tools, watches and chronometers.

Patent No.	Title of Invention	Inventor	Agency
2,398,250	Drilling Machine	Robbins, L.	Navy
2,398,251	Drilling Machine	Robbins, L.	Navy
2,438,941	Diamond Die Production and the Like.	Emerson, W. B. Nefflen, K. F. Peters, C. G. Harris, F. K. Cooter, I. L.	Com
2,476,965	Electric Drilling of Diamonds and the Like.	Emerson, W. B. Cooter, I. L.	Com
2,552,582	Dry Drilling of Diamonds and the Like.	Peters, C. G. Harris, F. K.	Com
2,569,854	Drill Tool	Hatcher, A. P.	AEC
2,585,916	Crystal Analysis Apparatus	Coleman, J. E.	Army
2,622,581	Dry Drilling of Diamonds and the Like.	Peters, C. G. Harris, F. K.	Com

SUBGROUP 39–54—Artists' materials

The following patents relate to establishments engaged in manufacturing materials and equipment for art work and drafting. Drafting instruments are classified in Subgroup 38–11.

Patent No.	Title of Invention	Inventor	Agency
2,553,600	Dividing Machine	Mattare, M. A.	Int
2,561,386	Stereoblique Plotter	Lewis, J. G. Buckmaster, J. L.	Int
2,576,921	Process for Producing an Ink-Receptive Surface on Tracing Cloth.	Buscher, J. H.	Int

SUBGROUP 39–81—Brooms and brushes

The following patent relates to establishments engaged in manufacturing household, industrial, and street-sweeping brooms; and brushes such as paint brushes, toothbrushes, toilet brushes, and household and industrial brushes.

Patent No.	Title of Invention	Inventor	Agency
2,521,738	Process for the Production of Artificial Bristles and the Like from Proteins.	McKeekin, T. L. Reid, T. S Warner, R. C. Jackson, R. W.	USDA

SUBGROUP 39–82—Cork products

The following patents relate to establishments engaged in manufacturing cork products from whole or ground cork. Included are bottle corks, life preservers, insulating material, tile, and other articles made of cork.

Patent No.	Title of Invention	Inventor	Agency
2,427,699	Crown Closures	Lathrop, E. C Aronovsky, S. I. Talburt, W. F.	USDA
2,433,849	Cork Substitute and a Process for its Production.	Lathrop, E. C Aronovsky, S. I.	USDA

SUBGROUP 39–85—Fireworks and pyrotechnics

The following patents relate to establishments engaged in manufacturing fireworks of all kinds, flares, flashlight bombs, and railroad torpedoes and fuses. Safety fuses and detonating caps are classified in Subgroup 28–26.

Patent No.	Title of Invention	Inventor	Agency
2,035,367	Means for Absorbing the Energy of a Falling Body.	Gibson, W. A	Army
2,170,815	Flare	Eroe, H. S	Army
2,297,538	Liquid Oxygen Explosive	Denues, A. R	Int
2,362,502	Pyrotechnic Compositions	Schladt, G. J	Army
2,369,142	Ground Signal Projector	Gilligan, C. W	Army
2,421,522	Rocket Projector and Projectile	Pope, W. B	Army
2,459,687	Aerial Signal	Decker, J. B	Navy
2,503,269	Rocket Propelled Illuminating Flare	Hickman, C. N	Army
2,509,943	Marker Flare	Silvey, G. A	Navy
2,530,454	Pyrotechnic Device	Fieser, L. F Van Lownen, W. F.	Army

SUBGROUP 39–98—Models and patterns

The following patents relate to establishments engaged in manufacturing models, patterns, and forms of all materials.

Patent No.	Title of Invention	Inventor	Agency
2,443,621	Mold	Kemble, H. C	Army
2,476,993	Process for Making Molds	Milton, C. L Nielson, C. A.	Army
2,476,994	Process for Making Molds	Milton, C. L Nielson, C. A.	Army
2,495,276	Process for Making Multipiece Molds.	Milton, C. L	Army

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AEC	Atomic Energy Commission
AF	Department of the Air Force
Army	Department of the Army
Com	Department of Commerce
FPC	Federal Power Commission
GSA	General Services Administration
HEW	Department of Health, Education, and Welfare
Int	Department of the Interior
Just	Department of Justice
Navy	Department of the Navy
Treas	Department of the Treasury
TVA	Tennessee Valley Authority
USDA	Department of Agriculture

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